

7-1-1931

Bulletin 113 - The Junior High School: An Annotated Bibliography

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Recommended Citation

Beu, F. A., "Bulletin 113 - The Junior High School: An Annotated Bibliography" (1931). *Eastern Illinois University Bulletin*. 204.
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The Teachers College Bulletin

Number 113

July 1, 1931

**Eastern Illinois State Teachers College
AT
CHARLESTON**

THE JUNIOR HIGH SCHOOL

An Annotated Bibliography

By

F. A. BEU

The Teachers College Bulletin

PUBLISHED QUARTERLY BY THE EASTERN ILLINOIS
STATE TEACHERS COLLEGE

Entered March 5, 1902, as second class matter, at the postoffice at
Charleston, Illinois. Act of Congress, July 16, 1894.

NO. 113

CHARLESTON, ILLINOIS

July 1, 1931

THE JUNIOR HIGH SCHOOL: AN ANNOTATED BIBLIOGRAPHY

An annotated classified bibliography of
the periodical literature dealing with the
junior high school, which was published
from January 1, 1920 to June, 1, 1930,
inclusive.

By

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Eastern Illinois State Teachers College.

The Eastern Illinois State Teachers College is a TEACHERS College, Class A, in the American Association of Teachers Colleges, and a College, First List, in the North Central Association of Colleges and Secondary Schools.

EASTERN ILLINOIS STATE TEACHERS COLLEGE AT CHARLESTON

(Printed by authority of the State of Illinois.)

INTRODUCTION.

The establishment of junior high schools as such did not begin until the close of the first decade of the twentieth century. Berkeley and Columbus are the cities generally cited as pioneers in the movement as they established such institutions during the school year 1909-1910. Los Angeles was the next city to organize a junior high school in 1911.¹

In recent years the increase in high school attendance has been greater than in any other unit of the public school system. During the period from 1890 to 1920, the total population of the United States increased from 62,522,250 to 112,078,611 or about 79 per cent; between 1890 and 1924 the increase in high school opportunity which America offered as measured by aggregate days of schooling provided in high school increased 2,465 per cent. During that period the number of secondary schools increased from less than 5,000 to 20,000. More than one public high school was established for every day in the years included.²

The junior high school enrollment increased 927 per cent between 1920 and 1924. There are about 1,100 junior high schools in the United States at the present time. Seventy-four per cent of the cities with a population over 100,000 have junior high schools.³

The increasing amount of periodical literature dealing with the junior high school makes it difficult for people to keep in touch with said literature. A survey of the early history of the junior high school movement shows that it was slow in starting, but in the last ten years (1920-1930), periodical material dealing with the junior high school probably exceeded that dealing with any other phase of secondary education.

The present bulletin is published to aid students, teachers, superintendents, administrators and other persons who desire to locate periodical material dealing with the junior high school. This bulletin should be a help as sometimes a person wishing to read a certain article has a hard task lo-

¹ Smith, W. A., *The Junior High School*, MacMillan Co., 1927, p. 98.

² Department of Superintendence, *Fifth Yearbook*, National Education Association, p. 22.

³ Logan, R. S. "The Junior High School and Its Relations," *Progressive Education*, 6:17-22, January, 1929.

cating the periodical material as it may be out of print, at the bindery, or lost. The task is further complicated by the fact that often the title of the article does not indicate the chief idea or ideas in the article. The annotated bibliography contained in this bulletin is intended to give the reader an idea of the contents of the articles dealing with the junior high school that have been published periodicals from 1920 to 1930. Thus, the bulletin should be a great time saver to students of education.

Aids for the preparation of this bibliography—Card catalogues in several libraries, which conformed to the Dewey Decimal System of Classification. The Readers Guide to Periodical Literature, The Reader's Guide Supplement, and the International Index to Periodicals. This bulletin does not include reports of boards of education in respect to the junior high school and is not intended to be exhaustive, but comprehensive.

The articles in this bibliography are classified according to the plan given on the next page, and listed alphabetically by author under each classification. An index of names is given on pages 71-73 and a subject index on pages 74-76.

An annotated classified bibliography of the periodical literature on the junior high school which was published from January 1, 1920 to June 1, 1930 inclusive. The material is classified under the following heads:

- I. Organization, administration, and supervision.
- II. Articulation of junior and senior high schools.
- III. The curriculum of the junior high school.
- IV. Educational and Vocational guidance.
- V. College entrance requirements.
- VI. Certain junior high schools.
- VII. Status, standards, tendencies, and trends.
- VIII. The training of junior high school teachers.

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- VII. Status, standards, tendencies, and trends.
- VIII. The training of junior high school teachers.

I. ORGANIZATION, ADMINISTRATION, AND SUPERVISION.

1. Ayer, F. C. "Objectives, Types, and Advantages of Upper Grade Organization," *Elementary School Journal*, 3:442-450; February, 1925.

This study is an analysis of the types of organization best adapted to the upper grades. The four kinds considered are the academic, industrial, platoon, and the junior high school. The people responding to the questionnaire were all in favor of the junior high school except three. They express the belief that the junior high school type aids in promoting attendance, specialization, vocational and educational guidance and allows for more supervision.

2. Binford, V. F. "General Shop Idea Applied to Junior High School," *Industrial Education Magazine* (August, 1925), 27:43-46.

A brief discussion of how a junior high may be run as a regular shop in connection with the school.

3. Booth, Grace. "Visual Education in Collinwood Junior High School," *Junior High School Clearing House*, 3:15-17; No. 2, May, 1928.

A discussion of the Visual Aids Service in the Collinwood Junior High School, which is made up of the teacher and twenty-five pupils as assistants. This service aims to eliminate many matters of routine in connection with visual education. This group meets weekly to discuss matters pertaining to conduct and management.

4. Bristow, W. H. "Reorganization of Secondary Education Under State Supervision," *School Life*, 14:173-175; May, 1929.

Presents data telling how school boards in Pennsylvania adopted a school program in accord with state specifications relative to their junior and senior high schools. They established separate junior and senior high schools if the enrollment was large enough. They found that a combination was advantageous if the enrollment was less than six hundred. The article, also, gives typical programs and methods used in the junior and senior high schools in that state.

5. Brown, W. W. "Possibilities of Administrative Organization of the Junior High School Under a Six Year Organization," *Educational Administration and Supervision*, 10:409-413; October, 1924.

The author is of the opinion that it is better for a city of from 5,000 to 25,000 in population to have one school building for the six years than to attempt to raise the money for two separate buildings. The junior and senior high school programs can be organized as two separate units in many ways. For instance, the junior high school may be started ten minutes later than the senior high school and dismissed fifteen minutes earlier in the afternoon. The records, teachers, assemblies, and principals are different for the two schools.

6. Clement, J. A. "Current Practice in the Organization and Administration of the Junior High School," *School Review*, 30:110-117; February, 1922.

The junior high school has gained in numbers rapidly in Kansas, where the author made the survey. The prevalent type of organization is the 6-3-3. The other two types most popular are the 6-2-4 and 6-6. Mr. Clement thinks that it is necessary to change the subject matter of the junior high school studies before they will be adapted to the individual needs of the students of junior high school age.

7. Cooper, W. J. "Some Advantages Expected to Result From Administering Secondary Education in Two Units of Four Years Each," *School Review*, 335-346; May, 1929.

The chief advantage of the plan suggested seems to be that the high school can finish the education of many students instead of preparing them for college. Another advantage is having them for a longer period than at present under the 6-3-3 plan.

8. Graham, B. G. "Supervision of Classroom Teaching in the Junior High School," *Addresses and Proceedings of the National Education Association*, 772-777; 1926.

Mr. Graham thinks that the most important work of the principal in the junior high school is supervision. He found that many principals were busy with routine affairs which they should have turned over to minor officials. Principals should be able to aid teachers in practically all their teaching difficulties and to be able to do that they must be experts in the art of teaching.

9. Johnston, L. M. "Pupil Participation in Administering the Junior High School," *Elementary School Journal*, 22:615-620; April, 1922.

The Oshkosh Junior High School at Oshkosh, Wisconsin, was confronted with several problems in discipline in connection with the passing of the classes. The matter was placed before the students in an assembly talk. The pupils suggested that the school be

organized on the basis of a city government. Accordingly a mayor, police, and other city officials were elected. The plan worked so well that the school city activities replaced the regular class in civics.

10. McClure, Worth. "The Junior High School Library in Seattle," Junior-Senior High School Clearing House, 4:113-116, No. 2; October, 1929.

A discussion of how a library may be organized and administered in such ways as to be a real benefit to junior high school students. The author gave an outline how it is done in Seattle.

11. Nugan, M. A. S. "Supervision of the Junior High School," Journal of Educational Method, 5:425-428; June, 1926.

The author points out that the people who are teaching in the junior high school or are preparing to do so have not kept pace with the progress made by the junior high school itself. He thinks this difficulty can be overcome by more and better supervision to a great extent.

12. "Organization and Administration of Rural Junior High Schools," School and Society, 29:434-435; April, 1929.

Most of the 1,181 junior high schools in rural districts have an enrollment of less than one hundred students. Only 173 are really junior high schools. The object of these schools being established in the rural districts is to reduce the mass instruction and give more help to the individual students.

13. Scott, R. R. "Difficulties Confronting the Small Junior High School in Realizing the Advantages of Reorganization," Peabody Journal of Education, 5:157-165; November, 1927.

The chief difficulties confronting the junior high schools are presented under the following headings:

- "1. Can the small junior high school provide for the nature of the adolescent?
2. Can the small junior high school adequately recognize individual differences?
3. Can the small junior high school provide adequately for vocational guidance?
4. Can the small junior high school lay the foundation of vocational guidance?

14. Tidwell, C. J. "Economic and Administrative Value of Platoon Plan in Junior High School," Addresses and Proceedings of the National Education Association, 998-999; 1923.

The administrative value of the platoon system is summed up as follows: (1) It is more economical as more students can be taught; (2) students can be grouped according to ability; (3) more electives may be offered; (4) the flexibility of the plan permits increased provision for individual differences.

II. ARTICULATION OF JUNIOR AND SENIOR HIGH SCHOOL.

15. Alltucker, M. M. "Articulation and the Junior High School," *Journal of the National Education Association*, 17:177-178; June, 1929.

Presents four types of articulation problems as found in twenty-two junior high schools taking part in the study:

- "1. General problems such as differences in basic educational philosophy.
2. Problems of school organization.
3. Problems of school administration and supervision.
4. Problems of the curriculum and instruction."

16. Ferguson, A. W. "Articulating the Junior and the Senior High Schools," *School Review*, 31:540-546; September, 1923.

Mr. Ferguson states that the most difficult problems in articulation are: length of time required to achieve articulation, difficulty of subjects, attitude of the two institutions toward one another, lack of opportunity for ability grouping, poor teaching in some cases, and lack of adequate facilities for articulation. He suggests that these difficulties may be lessened by selling the junior high school idea to the teachers long in advance of actually establishing it. He further suggests that the course of study may be planned so as to go into the work gradually, providing an expanding program of student activities for the seventh to the twelfth grade, and having a continuous guidance program throughout the six secondary years of education.

17. Gaumnitz, W. H. "Articulation Between the Junior and Senior High School," *School Life*, 13:112-114; February, 1928.

The author believes that there would be a better articulation between the junior and the senior high school if the people in charge of each would remember that they are working for a common objective, namely to provide better educational opportunities for the students.

18. Glass, J. M. "Mission of Junior High School is in Articulation and Guided Exploration," *School Life*, 12:112-115; February, 1927.

The author is of the opinion that very few schools have their subjects organized in such a manner as to

give continuity in the junior high school, and thinks that more time and effort should be given to articulating the subjects with the senior high school. He found evidence of many exploratory and survey courses.

19. Glass, J. M. "Articulating of Junior and Senior High Schools," *Junior-Senior High School Clearing House*, 4:55-57, No. 1; September, 1929.

In the first part the author discusses the need of articulation and its difficulties.

In the second part Mr. Glass gives a constructive program of articulation for the junior and senior high school in outline form.

20. Godsey, E. R. "The Articulation of Junior and Senior High School Latin," *Junior-Senior High School Clearing House*, 4:55-57, No. 1; 1929.

A brief discussion why the Latin taught in the junior high school does not articulate with senior high school Latin as taught at the present time.

21. Gugle, M. "Some Problems of the Junior High School," *Addresses and Proceedings of the National Education Association*, 217-221; 1920.

Miss Gugle says that one of the problems of the junior high school is to obtain good teachers, as these people must be well trained and in sympathy with young persons. She is in favor of the junior high school teachers having a college education for high school teaching instead of a grade preparation. Another problem is obtaining adequate salaries to employ the right kind of teachers.

22. Hawley, W. E., and Holzworth, C. H. "Actual Programs of Articulating Junior and Senior High Schools in Rochester," *Junior-Senior High School Clearing House*, 4:182-191, No. 3; November, 1929.

Discussion of actual programs of articulating the Junior and Senior High School in Rochester, New York. The author believes after five years experience that the six-year high school organized as a unit (not two separate schools) offers the best solution for articulation between the two schools.

23. "Incoordination between Junior and Senior High Schools," *School Review*, 35:644-645; November, 1927.

The author tested 312 third term pupils on material common to both junior and senior high school students and found that thirty-six per cent of those who had attended a junior high school failed, while only ten per cent of those who had attended a senior high school failed.

24. Mortensen, G. E. "Problems of Articulation Between the Elementary and the Junior High Schools," *Addresses and Proceedings of the National Education Association*, 642-646; 1928.

The author is of the opinion that the matter of articulation is as much a problem today as it was before the junior high school was introduced. He believes that the solution of the problem will be aided by putting the articulation on the basis of physical adjustment to the surroundings instead of on the basis of a changed study content.

25. Newlon, J. H. and Others, "Articulation Problems in Twenty-two School Systems," *National Education Association (Department of Superintendents, 7th Year Book)* 117-152.

Discussion of articulation problems are obtained from questionnaires sent to twenty-two junior high schools. The inquiry attempted to find out what curriculum difficulties the pupils encountered in transition from the elementary school to the junior high school and from the junior high school to the senior high school. The chief problems reported were homogeneous grouping, guidance program, obtaining teachers who would use the right method, and who had the right training. At the end of each problem comments and suggestions are given for its solution.

26. Shafer, H. M. "Six Years Unified High School vs. the Senior and Junior High School," *Addresses and Proceedings of National Educational Association*, 221-226; 1920.

This report shows the result of an experiment tried out in the city district of Los Angeles, California. Three types of organizations were tried: (1) schools organized on the six-six plan; (2) schools containing all the elementary grades with departmentalized seventh and eighth grade; and (3) schools on the six-three-three plan. As a result of this experiment the six-three-three plan with the junior high school in a separate building was adopted in Los Angeles, California.

III. THE CURRICULUM OF THE JUNIOR HIGH SCHOOL.

27. Abbott, I. L. "Metalwork in the Junior High School," *Industrial Arts Magazine*, 31:337-338; March, 1930.

A discussion and outline of the metalwork program in the Grand Rapids Junior High School.

28. Almack, J. C. "Course in Civics for Junior High School," *School and Society*, 12:623-624; December, 1920.

Since the problems which challenge the best thought of adults are the ones of interest to the youth of the land, these problems should be taught in the civics classes. The author made two studies to determine what these topics might be. One study dealt with the civic topics appearing in the daily papers and the other, such topics as were listed in the state, party, and national platforms. He is of the opinion if the above material is balanced by experts in the field we will have an excellent basis for material to teach in the junior high school.

29. Baker, G. D. "Curriculum Adjustments," California Quarterly Secondary Education, 4:356-359; June, 1929.

To meet the needs of individual pupils in the junior high school the author suggests special methods of teaching, special teachers, ability grouping and enriched curriculums.

30. Barton, A. W. "Importance of Extra-curricular activities in Junior and Senior High Schools," Junior High School Quarterly, 13:238-242; July, 1925.

A survey revealed that although the junior high schools are supposed to do a great deal with extra-curricular activities there is very little evidence to show that they do. The author believes that one of the important duties of the junior high school is the supervision of extra-curricular activities.

31. Bawden, W. T. "Creating a Curriculum for Adolescent Youth," Industrial Arts Magazine, 30:194-196, December, 1928.

Presents material to show that the outlook for industrial arts in the junior high school is very good. Practically all schools are giving "try-out" courses to aid the students in selecting the right work in the senior high school.

32. Bennet, Charles A. "Manual Arts in Junior High School," Manual Training Magazine, 23:73-77; September, 1921.

The article gives the result of a questionnaire sent out to 38 cities asking the people in manual arts what subjects they taught and how many hours per week. He found that the average school offered five subjects and taught these subjects four hours a week. The aims listed were:

1. Give immediate knowledge for a vocation.
2. Serve as a vocational guide.
3. Development of pupil in harmony with his constructive nature to become intelligent and efficient."

33. Benson, A. F. "Industrial Work in Junior High School," *Industrial Arts Magazine*, 20:339-344; September, 1921.

Mr. Benson gives a summary of the work at the Jordan Junior High School, showing the teachers in the school do not believe in the student doing his own selection of his subject. They have a system where the student has a choice of six subjects and each one is to be taken for a period of six weeks. During this period the student is watched very carefully to see what special work he is interested in and best fitted for. Finally, in the third year the student is allowed to elect his study. The other idea stressed in the article is that the students should not pay for the material used unless the product is taken home.

34. Beggs, B. L. and Herman, L. B. "Exploratory Courses in Junior High School Literature," *Elementary School Journal*, 28:778-789; June, 1928.

A report of the work of the teachers and parents at the Longfellow School, Oak Park, Illinois. They believe that the true desire to set up for literature is the creation of pupil industry, attitudes, and interests. To help attain this aim the Parent-Teacher's association donated two thousand dollars. An exploratory course was planned in which the children are given six weeks of work in the various phases such as the short story, ballad, and lyric. Then in the eighth grade they are introduced to the drama and some of the children even wish to write stories.

35. Boss, A. M. "Industrial Arts in the Bisbee Junior High School," *Industrial Arts Magazine*, 11:445-446; November, 1922.

A brief report of the manual arts course in the Bisbee Junior High School. A complete record is kept of each student's work to aid him in selecting the right course in the senior high school.

36. Brace, G. M. "Manual Arts in the Junior High School," *Industrial Arts Magazine*, 16:203-205; June, 1927.

The author believes each school should teach those things in manual arts that will help the students to appreciate those things found in the community in which he lives.

37. Bradshaw, C. R. "The Expression Subjects Taught in Michigan Junior High School," *School and Society*, 21:205-206; February 14, 1925.

In this junior high school all the students in the seventh grade are requested to spend one hour per week in art, music, and oral English. In the eighth grade

they may elect two of these and in the ninth grade, one. The teachers believe that this plan has aided the appreciation of art, music, and dramatic work.

38. Breslich, E. R. "Junior High School Mathematics," *School Review*, 20:368-378; May, 1920.

The writer thinks that a course in junior high school mathematics should be a combination of arithmetic, algebra, and geometry taught as a unit in psychological order. The quantity of work done should be enough so that the pupils will be able to finish plane geometry, some solid geometry, and algebra through quadratics in the tenth year.

39. Breslich, E. R. "Teaching of Mathematics in the Junior High," *School Review*, 29:38-48; January, 1921.

The author reports that recent textbooks on junior high school mathematics all show that a considerable amount of algebra, intuitive geometry, and arithmetic is now commonly included in a junior high school course. To these the committee would add numerical trigonometry and demonstrative geometry.

40. Brewer, J. M. "Argument for Junior Business Training," *School and Society*, 25:7-8; January 1, 1927.

Mr. Brewer believes the junior high school should give business training as it may be given as a tryout, orientation, introductory, or practical course depending upon the needs of the students in that school.

41. Brewer, J. M. "Need for Tryout Courses in the Junior High School," *Industrial Arts Magazine*, 11:85-88; March, 1922.

Brewer points out that "Tryout" courses extend the general education of the child as well as the vocational phase. "Tryout" courses may also be used to help in the selection of the right vocation for the child. He sums up his material by pointing out that not all courses need "Tryouts" and that some subjects are not suitable for such a course.

42. Brooks, F. D. and Bassett, S. J. "Retention of American History in the Junior High School," *Journal Educational Research*, 18:195-202; October, 1928.

The report is based on a series of tests relating to the retention of American History by 314 pupils in grade 7 and 8 of the Baltimore Junior High School. It was found that the pupils forgot 12.8% the first four months; 18.8% by the end of 8 months; 25% after twelve months; 33 1/3% at the end of sixteen months. It was also found that the people who knew the most originally retained the largest percentage.

43. Bullock, A. E. "Junior Commercial Curriculum; Abstract," Articles and Proceedings of the National Educational Association, 344-345; 1927.

The author gives three types of courses which are justifiable for junior high school commercial work: (1) a general exploratory course; (2) prevocational course, and (3) a foundation for the technical courses in senior high school.

44. Burling, B. B. "Practical Problems of the Electrical Course," Industrial Arts Magazine, 16:291-293; August, 1927.

This article is a good summary of the work that should be covered in an electrical course in a junior high school. It, also, gives twelve rules for the layout of jobs.

45. Butler, C. Q. "Problems in the Teaching of Junior High School Mathematics," School Science and Mathematics, 26:497-499; May, 1926.

Mr. Butler made an inquiry as to the difficulties and problem situations in teaching junior high school mathematics. The result of his inquiry is discussed under four heads:

1. General methodology.
2. Previous training and individual difference.
3. Attitude of the pupils.
4. Technique of instruction and management.

46. Butler, F. D. "Industrial Work in the Junior High School," Industrial Arts Magazine, 15:153-155; May, 1926.

Mr. Butler thinks it is the business of the junior high school to see that the boy is constantly getting a new view of himself and that this can best be done through the industrial arts and vocational courses in high school.

47. Carr, W. L. "Status of Latin in the Junior High School," Classical Journal, 23:286-295; January, 1928.

There are two reasons why Latin is not established in the junior high school; one, because it is given traditionally in the senior high school and the other, because the colleges will not give credit for it, if given in the junior high school. At present the first year of Latin is given during the three years of the junior high, but the author thinks the situation will soon be changed placing Latin on a par with other junior high school subjects.

48. Carman, K. V. "Results of an Inquiry Concerning Certain Phases of Junior High School Industrial Arts," Industrial Arts Magazine, 11:251-256; 373-377; July, October, 1922.

This article gives the results of a questionnaire sent to 225 men engaging in teaching manual training. The majority of answers were in favor of separate shops for the different courses in large school, but one large shop for small school. Most of the men thought 15-20 pupils an ideal number for a class. Practically all were in favor of a definite course being required for junior high school students in industrial arts.

49. Clark, J. R. "Mathematics in the Junior High School," Teachers College Record, 28:360-373; December, 1926.

The author gives these aims or objectives of junior high school mathematics: (1) to teach only the mathematics useful in modern life, (2) to develop skill in computation, (3) to teach common business practice, (4) to teach intuitive geometry, (5) to teach the function idea.

50. Clarke, Harry P., and Beatty, W. W. "Physical Training in the Junior High School," School Review, 33:532-540; September, 1925.

Gives a description of the program in physical activities in the Skokie School at Winnetka, Illinois. A large number of competitive games are depended upon because they offer the necessary "big muscle" training, the precision, and response which are called for in gymnastic training.

The academic teachers and the physical training teachers have agreed not to interfere with the time program of one another. A child is not made to do academic work when it is time for him to take part in athletics.

A record over a period of two years reveals that 700 individuals have taken part in 300 inter-school or intra-school match games without a single instance of an undesirable reaction from such participation.

"We have found a means of allowing physical activity to compete with the movies. Once the joys of sport have been realized to the full, we believe there will be implanted a strong antidote for the current craze for passive forms of recreation."

51. Clarke, M. V. "Latin in the Junior High School," Classical Journal, 23:183-191; December, 1927.

The writer accounts for the fact that Latin is not offered in more junior high schools than is now is due to tradition and public sentiment. He points out that many capable teachers have made it as interesting a subject as any taught in the junior high school.

52. Cowell, L. W. "Arithmetic in the Junior High School," School Science and Mathematics, 25:171-178; 363-370; February, April, 1925.

The author thinks that the student in the junior high school should be taught how to use the tools and fundamental operations of arithmetic in preparation for senior high school work in mathematics.

53. Curton, E. E. "Junior High School Science," *School Review*, 40:767-775; December, 1927.

The article gives a summary of a questionnaire sent out to people interested in teaching junior high school science. This questionnaire listed 548 specific topics and problems. There was no agreement as to the basic aims of junior high school science. There was a general agreement that the demonstration and discussion method were the most important.

54. Dickinson, M. "Craft Curriculum," *School Arts Magazine*, 27:32-37; March, 1927.

The author gives a detailed outline for craft work in the Junior High School of Richmond, Indiana, which could be used in practically any junior high school. Each craft is dealt with separately as to its history, mediums, and suggested first lessons. Each student is given a bibliography for the craft he selects.

55. Duff, J. C. "Librarian and the Junior High School," *Library Journal*, 50:402-404; May 1, 1928.

The author points out the importance of having a library arranged so that the books are of the type to interest students, and to aid with the readings for English work.

56. Edgerton, A. H. "Factual Basis for Curriculum Building in the Junior High School Industrial Arts," *Industrial Arts Magazine*, 14:79-83; March, 1925.

Reports from 379 intermediate and junior high schools showed that only 22 practical arts courses were complete as to industrial objectives. From interviews with 202 professional, commercial, and industrial men as to their opinion of the value of vocational training it was found that a large per cent favored a training which would give technical, vocational, and occupational knowledge. They also favored a pre-vocational or self-finding course in the junior high school.

57. Edgerton, A. H. "Industrial Arts and Prevocational Educational," *Industrial Arts Magazine*, 10:365-371, 407-411, 453-356; October, December, 1921.

The first part of the article, pages 365-371, gives in tabulated form the replies from 379 of the larger junior high schools concerning what they are doing in industrial arts work. The second part of the article, pages 407-411, 453-456, gives a summary in outline form of different types of manual arts. The following types of

courses are given: concrete work, sheet metal, electricity, general work, boat building, and vocational courses of various kinds.

58. Edgerton, A. H. "Reports," *Industrial Arts Magazine*, 11:23-25, 45-51; February, 1922.

Pages 23-25—The author gives a discussion of the characteristics of early adolescence as reported by students of psychology. He concluded that the project method is adapted for students of the junior high school period. Gives an outline of an actual course given in the Ethical Culture School, New York City. In the second reference, pages 45-51, the author closes the above article with discussions about practical courses in electricity offered in the Duluth Junior High Schools. He gives suggestive types of industrial arts projects and problems for making a doll house, concrete construction, garage construction, ballot boxes and booths, and radio construction.

59. Fairbanks, H. W. "Can the Educational Value of Real Geography in the Junior High School be Replaced by Any Other Subject or Combination of Subjects?" *Journal of Geography*, 287-293; November, 1927.

The author is of the opinion that no other combination of subjects can be taught in the place of geography. The attempt to do so will break the continuity of the work. He is of the opinion that it has been proved in many school rooms that there is no substitute for real geography.

60. Fish, O. C. "Aims and Content of Junior High School Geography," *Journal of Geography*, 313-321; November, 1927.

Presents data to show that the aims and content of junior high school geography have changed greatly since the World War. Last part of the article is an analysis of the content of several modern geography books.

61. Ford, P. J. "Biological Nature Study Course of Study Unit Junior High School," *Journal Educational Method*, 5:347-352; April, 1926.

This is a course of study unit for nature study in a junior high school as used at Western State Normal School, Kalamazoo, Michigan. General objectives are given for the courses. Desired outcomes are outlined. At the end of the article there is a list of books which may be used for further study.

62. "Forum on Fundamental Problems of the Junior High School Curriculum," *Addresses and Proceedings of the National Education Association*, 781-786; 1927.

A report of discussions by Frank W. Ballow, Ernest Horn, H. B. Wilson, and H. S. Weet on fundamental problems of the junior high school curriculum.

63. Friese, J. F. "Architectual Drawing in the Junior High School," *Industrial Arts Magazine*, 25:282-283; April, 1924.

Mr. Friese states that architectual drawing is ridiculed by many teachers as a subject for the junior high school, but that their course at Tulsa is the most popular one offered. He believes this popularity is due to the way they plan and teach their courses. The aims of their course are:

"To develop an occupational interest, to give occupational information, to give art appreciation, to develop home mechanics, and to give the boy an opportunity to express himself in his own way, about that type of work."

64. Gathany, J. M. "Teaching of the Social Science Studies in Junior High School," *Historical Outlook*, 14:257-260; October, 1923.

The author discusses the advantages and disadvantages of teaching social science studies through the topical method, debates, discussions, the outline study method, problem method, and the project method.

65. Glass, J. M. "Commercial Education in the Junior High School," *Addresses and Proceedings of the National Association of Education*, 382-383; 1926.

Mr. Glass is of the opinion that a junior high school which does not offer the students an opportunity to take an introductory commercial course is not complete. He suggests that the course be an introductory one which will lead naturally and gradually to the completion of the commercial curriculum of the senior high school.

66. Glass, J. M. "Curriculum Practices in Junior High Schools as Revealed in a Recent Commonwealth Fund Investigation," *High School Quarterly*, 154-160; April, 1924.

The author's investigation revealed that there is very little uniformity in curricular practice. The schools did not even agree as to how much time should be given to a certain subject. For example, English was given more than twice as much time in one school as in another. He found very few schools having a core subject extending through the three years of the junior high school. There was a big difference in the number of constants and variables from school to school. As a whole he thought that the conditions showed signs of progress as many teachers were at work reformulating the curriculum.

67. Glass, J. M. "Junior High School Program of Studies," Addresses and Proceedings of the National Education Association, 386-400; 1922.

A preliminary report of a sub-committee on the program of studies in the junior high school, appointed by a general committee of the national council of Education. The first part of the report is devoted to a program of studies to provide for individual differences, exploration, ability grouping, and extra-curricular activities. The second part presents a typical program of study divided into constants and electives.

68. Glass, J. M. "Library in the Junior High School," Library Journal, 50:123-125; February 1, 1925.

Mr. Glass believes that the library is the most important thing in the junior high school. It should be located where it is accessible to the most people. His chief reason for placing it first in the activities of a junior high school student is that the child learns through self-activity rather than from a textbook in a modern school.

69. Glaser, E., and Hawkinson, E. A. "Curriculum Enrichment in the Junior High School," Journal of Educational Method, 5:206-212; January, 1926.

The authors give the results of an experiment to engender a many-sided interest in books. They attempted to have the children read for knowledge and curiosity; the work was done along project lines. They are convinced that this method is a feasible way of enriching the work in the junior high school.

70. Goddard, H. M. "General Science in the Junior High School," School Science and Mathematics, 21:52-60; January, 1921.

The author believes that general science will have a definite place in the junior high school as soon as it is well taught and teachers agree as to what should be taught.

71. Gosling, F. W. "Social Science Core for the Junior and Senior High School Curriculums," School Review, 30:584-591; October, 1922.

Superintendent Gosling thinks that a great deal of constructive thinking must be done before the social science studies can be permanently established in the junior high. Teachers must show the real value of the studies and a practical way of placing them in the program. Gosling gives a list of twenty objectives for the boys and girls of which the following are typical:

"To have respect for law and authority; to have an interest in others as individuals; to have an interest in community life; to acquire some skill in a certain vocation."

72. Gosling, F. W. "Social Studies in the Junior High School," *School and Society*, 16:623-627; December 2, 1922.

We need social studies in the junior high school as that is the period when children are interested in social and religious work. Many schools are now organizing courses so the students may express their interests. The author cites as an example the work of Rugg in combining history, geography, and civics into a single course.

73. Hatch, R. W., and Stull, D. "Unit Fusion Course in the Social Studies," *Historical Outlook*, 17:371-374; December, 1926.

Fusion courses are in demand as many teachers think that a large percentage of history, geography, and government as now taught is not carried into constructive citizenship. A fusion course is one in which the facts are found, filtered, fused, and followed. The difference between correlation and fusion is that the latter looks forward to the end resultant.

74. Hatch, R. W., and Stull, D. "Unit Fusion Course in the Social Studies for the Junior High School," *Teachers College Record*, 28:467-480; January, 1927.

The first part of the article reports the growth of social studies in the junior high school from the year 1915 to 1927. The second part gives the points of view of such men as Professor H. Rugg and Professor John Dewey as to how social studies should be taught today.

75. Hatfield, W. W. "English in the Junior High School," *English Journal*, 14:355-369; May, 1925.

The author discusses the teaching of English in respect to departmental work, libraries, specialization, clubs work, and social conditions. The last part of the article gives the psychological conditions and factors involved in teaching English to students in the junior high school.

76. Hessler, J. C. "Is General Science Destined to Go Down Into the Junior High School, If So What Will Be the Content of the Course?", *School Science and Mathematics*, 22:246-251; March, 1922.

Hessler thinks that general science is destined to go down into the junior high school. The general science course should be:

On an individual experimental basis, required readings, interest and desire to know more of science. There must be smaller classes and fewer demonstration classes.

77. Hill, H. C. and Weaver, R. B. "Unitary Course in United States History," *School Review*, 37:256-266, 363-370; April, May, 1929.

In the unitary course only the material is selected which serves to interpret the movements of the past, and which has educative worth. The authors list five steps involved in teaching the unitary course:

1. Exploration.
2. Presentation.
3. Assimilation.
4. Organization.
5. Recitation.

The authors think all teaching must be changed in order to aid the students according to their ability.

78. Hill, H. C., and Others. "Teaching of Civics in the Junior High School With Special Reference to the Work of the Ninth Grade," *Historical Outlook*, 17:7-26; January, 1926.

Mr. Hill believes that if civics is to be taught only one year in the junior high school it should be offered in the eighth grade, as many leave school after that grade. The teacher of civics should provide for the participation of pupils in civic activities in order that civic habits and skills may be established.

79. Hinkle, E. C. "Algebra in the Junior High School," *School Science and Mathematics*, 25:271-286; March, 1925.

The author states the following aim for teaching algebra in the junior high school: "The aim of teaching mathematics in the junior high school is to familiarize the pupils with the mathematical subject matter beyond the first six grades that will be of the most practical value to them as citizens and as students, and at the same time to encourage correct study habits, coherent thinking, correct language, neatness in written work, and an interest in the subject of mathematics."

80. Holman, W. L. "Standardizing Industrial Education in the Junior High School," *Industrial Education Magazine*, 30:417-418; May, 1929.

Through standardization effectiveness can be brought about with respect to the unit of credit, project method, length of period, and length of term.

81. Hopkins, L. Thomas, and Paul, F. S. "Analysis of Thirteen Series of Junior High School Textbooks," *5th Yearbook of the Department of Superintendence*, 202-207; 1927.

Textbooks represent an attempt to express a program of teaching material. As long as they determine to a very real degree the course followed by teachers they

will be factors to be taken into account in preparing courses of study. This analysis reveals the material which mathematics teachers who depend on texts have to draw upon. An outline of the objectives for textbooks is given on page 203. An analysis of topics is thirteen series of textbooks is given on pages 205-206.

82. Horn, O. P. "Lessons in Graphs in Junior High School," *Popular Education*, 40:498-500; May, 1923.

A brief discussion of how to teach the use of graphs in junior high school.

83. Horning, S. D. "Auto Mechanics in the Junior High School," *Industrial Arts Magazine*, 17:157-159; May, 1928.

This article reports the result of a questionnaire on auto-mechanics sent to 119 school systems. Over fifty per cent gave the course, but only thirty-three per cent thought it should be required. In the report data are given as to the size of the classes, duration of the course in weeks, method of presenting the course, and material covered in the course.

84. Hudelson, E. "Democracy and Junior High School," *School and Society*, 12:464-466; November, 1920.

The author thinks that the junior high school will help to develop democracy and promote our citizenship. This belief is based upon the fact that students in the junior high school are allowed freedom to exercise their judgment in various ways.

85. Hunter, W. L. "Manual Arts in the Junior High School," *Industrial Education Magazine*, 31:14-15; July, 1929.

The author gives in outline form the aims of a manual arts course for the junior high school and discusses better teaching and organization in connection with the course.

86. "Industrial Arts Work in the Junior High School," *Industrial Arts Magazine*, 16:236-237; June, 1927.

This is a report made by a committee of principals in a California Junior High School. The statements are from schools having enrollments from seventy-five to twelve-hundred students. The committee, recommended and listed twelve objectives for manual training set up by the Department of Superintendents of the National Education Association.

87. "Junior High School and Home Economics," *Journal of Home Economics*, 20:660-661; September, 1928.

A survey of 139 high schools to ascertain what the girls should obtain from a course in home economics. Of the schools reporting, 97% require some course in

the seventh grade, 81% require a course in the eighth grade, and only 16% in the ninth grade. The size of the school seemed to have little effect upon the courses. The courses offered are designated by such names as cooking, sewing, domestic science, household arts, practical arts, domestic arts, home making, and laundry. In fact, so many terms are used that it is hard to tell what is really taught.

88. Jaslow, M. B. "Junior High School and the Drama," *Education*, 40:473-487; April, 1922.

Since the pupils are still in the formative stage, the junior high school is the place to begin teaching appreciation of the beautiful through the drama. The dramatic tendency is strong in children at this age and their attitudes can be more easily developed than in adult life.

89. Johnson, J. T. "Geometry in the Junior High School," *School Science and Mathematics*, 25:611-617; June, 1925.

Presents data based on questionnaire returns from twenty-four members of the Chicago Men's Mathematics Club in regard to the grade in which certain theorems, propositions, et cetera, in geometry should be taught. The amount of space devoted to geometry and trigonometry in ten standard textbooks in junior high school mathematics is given in tabulated form. Mr. Johnson thinks demonstrative geometry and trigonometry should not be taught in the junior high school.

90. Judd, C. H. "Social Studies as the Core of the Junior High School Curriculum," *Addresses and Proceedings of the National Education Association*, 776-781; 1927.

Mr. Judd thinks that unless we change the curriculum in the junior high school from the one given in the regular grade work we have a junior high school in name only. From his point of view the only legitimate type of junior high school curriculum is one which subordinates all things to the social training of the child. This can be done by selecting one subject and building all the others around that one. Judd selected mathematics as the core subject for his discussion.

91. Knowlton, D. C. "Building a Course in the Social Studies for the Junior High School," *Historical Outlook*, 15:356-360; November, 1924.

There is a demand for a thorough-going reorganization of the course of study in the junior high school. There is a demand for courses of study in history, geography, and civics to be taught by one teacher. This can be done by fusing and correlating the

material into one course or by teaching the material as a cycle keeping the subject matter separate but closely correlated. A summary is given of the content of such a course by grades.

92. Knowlton, D. C. "History in Its Relation to the Junior High School," *Historical Outlook*, 16:18-22, 76-79, 114-117, 171-175, 222-225; January, May, 1925.

Pages 18-22—A discussion of history and what material to select for junior high school students.

Pages 76-79—A discussion about the teaching of history and how to make use of map equipment, picture material, the workroom, and periodical material.

Pages 114-117—The author shows how problems may be used in teaching history and the value of lesson planning.

Pages 171-175—A continuation of problem teaching in history using time charts, maps, pictures, cartoons, and graphs.

Pages 222-225—Illustrates the use of dramatization in history and gives an outline of an actual play used in a junior high school.

93. Koos, L. V. "Junior High School and the Elementary School," *Educational Review*, 62:309-316; November, 1921.

The author gives the direct and indirect effects of the junior high school upon the elementary schools. He thinks the direct effects are: (1) removal of the seventh and the eighth grades from its province, (2) focusing of attention upon the fifth and the sixth grades, (3) removal of over-age to the junior high school, (4) fewer problems in discipline, and (5) simplification of the tasks of the principal.

94. Krank, E. M. "Curriculum Study in Astronomy," *School Science and Mathematics*, 26:952-956; December, 1926.

The author reports that a great deal more could be done with astronomy in the junior high school than is at the present time as survey revealed that 27% of the questions which the children asked in science pertained to astronomy. He recommends first, the study of the earth in its relation to the universe, sun, moon, planets, stars, comets, and meteors; secondly, the earth and its relation to revolution, rotation, time measurements, eclipses, meridians, parallels, tides, magnetism, and origin of the earth.

95. Lackey, E. E. "A Selection of Geographical Material for the Junior High School," *Journal of Geography*, 25:137-144; April, 1926.

The author expresses the belief that geography is not very successful in the junior high school because most schools are still using the two-cycle series textbook which was used in the sixth grade.

96. Laidley, Mary F. "Composition Interests of Junior High School Pupils," *English Journal*, 14:201-209; March, 1925.

The examination of at least one issue of the publications of forty-six widely distributed junior high schools revealed: (a) the wholesomeness, sincerity, and clarity of pupils' minds; (b) the absence of personal experience or feeling contributions; (c) the absence of any descriptive writing; (d) the small amount of material on nature or outdoor life; (e) the lack of civic material; (f) the emphasis upon information.

97. Lindquist, T. "Junior High School Mathematics," *Educational Review*, 28:368-378; April, 1920.

Mr. Lindquist believes that the work in arithmetic, algebra, and geometry should be given as a unit, and that mathematics should be Americanized. His idea of the junior high school is that the students should be put into situation to find themselves rather than to train them for a special vocation. Therefore, he believes in a many-sided mathematics.

98. Lindquist, T. "Computations in Junior High School Mathematics," *High School Quarterly*, 11:73-79; January, 1923.

The author believes that in order for the junior high school to serve its students to the best advantage in mathematics, numerical computations must be stressed. He would do this through reviews, accuracy drills, approximation work, and work in short cuts.

99. Lindquist, T. "Up to Date Problems in High School Mathematics," *School Science and Mathematics*, 20:305-311; April, 1920.

Lindquist's summary is:

Forms of problems:

- (a) Exercise and drill.
- (b) Practical problems.
- (c) Based on stated data.
- (d) Problems without numbers.

Sources of problems:

Text, local data and conditions, sports, projects, business, number contests, mock activities, and historical studies.

100. MacCreary, M. "Creative Urge," *English Journal*, High School edition, 17:841-845; December, 1928.

A report of what is being done at the Thomas Jefferson Junior High School, Cleveland, Ohio, to develop the special talents of the students through shop work, music, home economics, and creative writing. Special attention is given to the foreign children.

101. Mackie, R. A. "Junior High School," *Education*, 65:1-13; September, 1924.

The discussion is divided into three parts: Part one gives the object of the elementary school to the sixth grade. Part two gives the object of the secondary school. Part three deals with grades 7, 8, and 9, telling how they can aid in keeping students in school longer and interest them in their work through different subjects and methods than are used traditionally.

102. Mallot, D. "Arts in the Junior High School," *School Arts Magazine*, 28:268-270; January, 1929.

Art courses should not be required all three years of the junior high school. The work should be interesting enough so that the students will want to elect it the last two years.

103. Marshall, L. C. "Composite Course for the Junior High School," *Historical Outlook*, 14:398-402; December, 1923.

A report of a commission authorized by the Association of Collegiate Schools of Business to study the correlation of secondary and collegiate education. This commission decided that a composite of history, economics, government, sociology and geography is necessary.

104. Martin, M. C. "Geography in the Junior High School," *Journal Geography*, 25:250-257; October, 1926.

In the junior high school geography should deal with the economic aspect rather than the general life of the people as is the case in the lower grades. We should teach human geography to interpret local geography and explain the use of land and resources.

105. McConathy, O. "Vocal Music in the Junior High School," *Etude*, 46:924; December, 1928.

A brief discussion of vocal music for students in the junior high school.

106. McConnel, W. R. "Place of Geography in Junior High School," *Journal of Geography*, 23:49-58; February, 1924.

The author of the article thinks that geography should be taught as a separate subject in the junior high school and not as part of a social science course. He would stress geographic principles rather than fact knowledge.

107. McGregor, A. L. "English in a Junior High School Setting," *English Journal*, High School edition, 17:41-49; January, 1928.

The chief difficulties in teaching English in the junior high school are, first, vitalizing the subject; second, showing relationship of English to other subjects; third, keeping in mind the matter of individual differences; fourth, teaching material according to interest of the boys and girls, as each group has different interests.

108. McKinney, J. "Manual Arts in the Junior High School," *Industrial Education Magazine*, 25:93-97; October, 1923.

Many schools have added manual arts to the junior high school curriculum to aid in keeping students in school, and allowing them more freedom in their work than the regular class work.

109. Miller, J. G. "Geography as a Social Science in the Junior High School," *Educational Review*, 24:341-349; December, 1925.

The writer thinks that geography is one of the most important studies for the junior high school pupils as it aids citizenship.

110. Miller, J. G. "Geography as a Social Science in the Junior High School," *Educational Review*, 70:213-218; November, 1925.

The article gives a general plan for geography as a junior high school subject. The course should start with primitive man and advance to man as a highly developed individual. Such a course, if well taught, will develop an appreciation of what it means to live together efficiently in our modern, complex, social organization.

111. "Music Appreciation," *Etude*, 65:108; February, 1927.

A course in music appreciation should be given in every junior high school. The course should be general enough to include practically all the activities in music in order that students may have a "tryout" in as many as possible.

112. Nolan, O. I. "Project Method in Junior High School," *Education*, 64:274-289; January, 1924.

A discussion of the project method, showing why the junior high school grades are particularly adapted to it. The advantages of the project method are given as promoting self-activity, providing purposeful work, teaching cooperation, and teaching to think.

113. Nyberg, J. A. "Teaching Formulae in the Junior High School," *School Science and Mathematics*, 21:409-417; May, 1921.

There are many formulae which we may teach high school pupils to use even though they do not know exactly what the formulae mean. It is not essential for a student to know in all cases why a certain thing is used, but they should know how to use it.

114. Fattison, R. G. "Recent Trends in the Social Science Curriculum in the Junior High School," *Education*, 69:257-267; January, 1929.

The trend in social science in the junior high school is for "Fusion" courses, that is, combining the material in several subjects into one. The work of H. O. Rugg of Teachers College, New York, and Franklin Bobbitt at the University of Chicago has contributed a great deal to such courses.

115. Phillips, C. E. "Manual Training as an Integral Part of the General Education Plan of the Junior High School," *Industrial Arts Magazine*, 26:289-291; August, 1924.

The author justifies manual training in the junior high school on the ground that it is general training, which is of value to the boy no matter what course he decides to follow in high school.

116. "Report of the National Council Committee on High School Geography; Geography in the Junior High School," *Journal of Geography*, 31:207-220; September, 1927.

The article presents definite reasons for including geography in the curriculum of the junior high school, showing the practicality of the subject, its influence in developing citizenship, aiding economic understanding, and fostering intellectual maturity. A summary of objectives is given at the end of the article.

117. "Report on a Minimum Grammar by a Committee of the English Teachers' Association of Wisconsin," *English Journal*, 17:213-219; March, 1928.

A suggested course of study for the teaching of grammar in the seventh, eighth, and ninth grades. In making the course of study the committee considered the value of grammar (1) as a school subject, (2) in developing mastery of the sentence, (3) in teaching the child accepted usage.

118. Reeve, W. D. "Curriculum Problems in Junior High School Mathematics," *Teachers College Record*, 29:334-344; January, 1928.

The author gives four important steps to be considered in teaching junior high school mathematics: "(1) Find out what mathematics is worth learning, (2) determine the nature of the content material which will best aid in realizing this objective, (3) study methods of teaching and learning, (4) provide an adequate testing problem to see that aims are realized."

119. Rice, C. M. "Junior High School Metal Shop," *Industrial Education Magazine*, 30:454-455; June, 1929.

The article gives a description of the metal shop in Everett, Washington. The course offered is such as to fit the needs of all the pupils as the city does not have a trade school. The time devoted to the work is one hour a day for five days a week. Many projects are carried on in the class to aid in providing for individual needs.

120. Richardson, W. "Social Science in the Junior and Senior High Schools," *Historical Outlook*, 14:189-199; May, 1923.

A general outline is given for the correlation of the social science studies throughout the secondary school. The last part of the article discusses briefly the objectives of the social science courses in the junior and senior high schools.

121. Roberts, E. D. "Trends in Junior High School Curriculum Development," *Addresses and Proceedings of the National Education Association*, 789-796; 1926.

Summarizes trends in respect to curriculums in the junior high school. The author includes what he considers a good curriculum.

122. Roberts, W. E. "Woodwork in the Junior High School," *Industrial Arts Magazine*, 27:287-290, 361-366, 397-399; 28:7-13, 43-46, 70-73, 112-114, 182-186, 248-252; March, May, October, December, 1926; February, July, 1927.

Pages 287-290—Report of an experiment in cooperation between a home economics class and a manual training class.

Pages 361-366—Discussion of the place of manual arts as a fundamental subject in the junior high school.

Pages 397-399—Presents the four periods when manual arts functions in a child's life; namely, the play period, adjustment stage, exploration period, and period of tentative choice.

The material in volume 28 presents material on how to use the project method in woodwork in the junior high school.

123. Roberts, W. E. "Manual Arts in the Junior High School," *United States Bureau Educational Bulletin*, 11:1-89; 1924.

This article gives a report or outline of manual arts in fourteen typical junior high schools. In each case there is a brief discussion of the course and the actual working conditions in that city. There are suggested lists of equipment which would be of value to anyone starting a new shop.

124. Rodgers, J. H. "Curricula and Programs," *School Review*, 29:198-205; March, 1921.

Twenty-five per cent of the junior high schools had only one fixed curriculum. By means of graphical comparisons he showed that the three-year junior high school is much better than the two-year type of organization.

125. Rodgers, R. H. "Greater Educational Returns From Industrial Arts in the Junior High School," *Industrial Arts Magazine*, 14:1-3; January, 1925.

The author points out that greater benefits would be obtained from industrial arts if the courses were organized in such a way as to give vocational guidance, trade and occupational work.

126. Roemer, J. "A Project in Teaching Morals and Manners in a Junior High School," *Junior-Senior High School Clearing House*, 4:109-113, No. 2; October, 1929.

The author gives an outline of a course in morals and manners as it is given in a junior high school in Tampa, Florida.

127. Roemer, J. "Introducing a Program of Extra-Curriculum Activities in Junior High School," *School Review*, 35:516-521; September, 1928.

A rather detailed report of what J. W. Compton did at Tampa, Florida in introducing a program of extra-curriculum activities. He held six meetings at which they discussed these topics:

- (a) Aims and functions of extra-curriculum program.
- (b) Home room.
- (c) Club program.
- (d) Assemblies.
- (e) Publications.
- (f) Student participation in the school control.
- (g) Thrift programs.
- (h) Health programs.

The value of this plan was that the students, teachers, and parents were well informed about the program and each found his place in the scheme.

128. Romer, M. D. "Junior High School Course Based on Two Rotating Cycles; Memorial Junior High School, San Diego, California," *School Life*, 12:8-9; September, 1926.

Explains the workings of the two cycles. The students spend four weeks in each cycle. In one cycle the school gives library, penmanship, spelling, hygiene, and horticulture; the other cycle for the boys includes two shop courses and a fine arts, while the cycle for the girls has cooking, sewing, and fine arts. In addition the school has thirty clubs and every student must belong to one or remain in the study hall during the activity period.

129. Rowell, P. E. "Junior High School Science," *Educational Review*, 46:21-23; June, 1923.

Mr. Rowell is of the opinion that a blending of all branches of science is necessary to teach an introductory course successfully. The subject should be taught in such a way as to interest the pupil instead of from the scientist's point of view.

130. Ruhlen, H. D. "English Curriculum," *English Journal*, 16:440-445; June, 1927.

This article explains how the students in the Cleveland Junior High School are sectioned in their English work according to intelligence tests given at the beginning of the year. The work in each section is then arranged according to the needs of the pupils.

131. Sawyer, R. G. "Industrial Arts in Jacksonville, Florida," *Industrial Arts Magazine*, 13:361-365; October, 1924.

The curricular scheme is one of constants and variables. The students are all required to take a constant program in the seventh grade, but are allowed one variable in the eighth, and two variables in the ninth. In all grades the pupils are divided into fast, medium and slow groups.

132. Seawell, R. T., and Rystrom, A. "Junior High School Program of Studies," *California Quarterly Secondary Education*, 5:239-242; April, 1930.

The authors give in outline form the program of studies in the Central Junior High School, Riverside, California.

133. Seybold, A. M. "Vitalizing Description and Narration for Junior High School Students," *Junior-Senior High School Clearing House*, 4:527-532, No. 9; May, 1930.

Discusses the various methods which may be used to vitalize narration and description in junior high school English classes. The author suggests the use of pictures, motion pictures, lantern slides, pantomime, dramatization and reading books.

134. Shepherd, Edith E. "An Experiment in Teaching Usage to Junior High School Pupils," *School Review*, 33:675-684; November, 1925.

In this experiment the teachers attempted to eliminate the lesson learning attitude by emphasizing: (a) the pupils own needs for instruction in usage; (b) his responsibility for using it in all written work; (c) the fact that no matter where he had written work it was evidence of his need for instruction in usage and the mastery of the principles studied. The teaching technic

was that papers were used from all class work to show the students that all teachers were cooperating. The results seemed to be better than any previous experiments tried.

135. Shepherd, Edith E. "The Attitude of Junior High School Pupils Toward English Usage," *School Review*, 34:574-586; October, 1926.

This experiment is a continuation of the above work in which the author points out that about one-half of the students acquired the right attitude due to the work given. Conclusions as to the essential aspects of effective method in teaching usage at this level were: (a) individual instruction; (b) emphasizing the fact that the pupil should use the knowledge acquired in every way; (c) obvious cooperation of other departments with the people in the English department; (d) determination of mastery from all pupils' written work; (e) making pupils conscious of, and interested in their own usage problems; (f) encouraging self correction; (g) encouraging written work of right kind in other classes; and (h) making them understand that careless work will not be accepted.

136. Slinker, C. D. "Business Education in the Junior High School," *Vocational Education Magazine*, 2:557-558; March, 1924.

Presents a general business information course for junior high school in outline form.

137. Smith, L. G. "Opportunities in Junior High School Libraries," *Addresses and Proceedings of the National Education Association*, 1027-1031; 1922.

A very good discussion of how the library may aid in attaining the objectives set up for the junior high school. The special opportunities mentioned in this article are that the library may aid in keeping students in school longer, provide for a better transition to the high school, provide for individual differences through directed reading, and exploratory reading through the various types of books and magazines suitable for students of different ages.

138. Snedden, D. "Education for a World of Team-Workers and Team-Players," *School and Society*, 20:552-557; November 1, 1924.

Snedden raises the question to what extent people should be trained alike and to what extent differently. He does not answer the question except to say that we ought to teach the children to have certain national ideals and habits.

139. Snedden, D. "Junior High School Offerings," *School and Society*, 20:741-744, December 13, 1924.

The author presents possible junior high school offerings under fifty-six "lotments" or courses. In the second part of the article he presents possible programs for individual students, giving a program for a girl desiring to specialize in music.

140. Snedden, D. "Mathematics in the Junior High School," *School and Society*, 14:619-627; December, 31, 1921.

Snedden thinks that all mathematics courses in the junior high school should be elective, and the students should select the course which probably would aid them most in personal and social needs.

141. Snedden, D. "Household Arts for the Junior High School," *Journal of Home Economics*, 13:289-295; July, 1921.

The author thinks that household arts should be given to the junior high school students on a par with English, Latin, algebra, and science. The work should be given to meet the needs of different types of girls and their home conditions. The length of time they are to be in school should be considered.

142. Spaulding, F. T. "The Progress of Studies in the Small Junior High School," *Addresses and Proceedings of the National Education Association*, 474-481; 1928.

To allow the teachers to have more students in their classes the subject should be divided into those demanding skill and the content kind. To aid students further the author would have the teachers give out graded assignment sheets, as in factory production work. In that way pupils could advance at their own rate and the teacher could give more individual attention. There are disadvantages in this plan, but they are less than the good points.

143. Spencer, H. H. "Some Present Tendencies in Industrial Tryout Courses in Junior High Schools," *Industrial Education Magazine*, 30:50-51; August, 1928.

The replies from 80 junior high schools in the United States in respect to tryout courses in manual arts are tabulated. Data are presented on the following points: tryout courses, the kind of activity, length of class period, type of instruction, and facilities for teaching.

144. Stone, S. I. "Social Science in the Junior High School," *School Review*, 30:760-769; December, 1922.

The author thinks that in order to teach ideals, habits, knowledge, and attitudes many subjects should be combined. The subjects he would combine are civics,

home making, geography, citizenship, state history, economics, sociology, American history, and modern history.

145. Steinmetz, K. E. "Visual Education in Teaching the Natural Sciences in the Junior High School," Addresses and Proceedings of the National Education Association, 956-958; 1928.

The author thinks that motion pictures, if used in moderation are a great aid in teaching the natural sciences in the junior high school. Films may be used to present complex reactions, drawing, and more material than could be done in any other way. The length of the film should depend upon the group you are teaching and the material taught.

146. Tryon, R. N., and Others, "Program of Studies in 78 Junior High School Centers," School Review, 35:96-107; February, 1927.

Presents data received from 78 junior high schools concerning their programs of study. Gives tables dealing with the various phases of the program. Practically all of these schools give a continuous and articulated curriculum in their institution.

147. Twogood, A. P. "Status of Industrial Arts in Junior High School," Industrial Arts Magazine, 13:266-267; July, 1924.

Mr. Twogood gives three good reasons why industrial arts is in the junior high school: (a) for the enrichment of the general curriculum; (b) for the development of the student's interest in industrial occupation, and (c) for the acquisition of skill.

148. Unzicker, S. P. "Place of Science in the Junior High School Curriculum," Elementary School Journal, 28:382-386; January, 1928.

The author believes that science should have as important a place in the curriculum as any other subject. He summarizes the need of such a course in this article.

149. Ward, D. A. "Vocational Courses in the Junior High School," School and Society, 25:711-716; June 18, 1927.

All education is vocational according to Mr. Ward. For this reason he thinks that many courses in the junior high should be exploratory. Courses should be given other than those having immediate community interests. He refers to home-economics, land-agricultural pursuits, etc., as vocational.

150. Weiser, A. B., and Ashbaugh, E. J. "What Books do Junior and Senior High School Students Read?" Educational Research Bulletin, Ohio State University, Columbus, Ohio. 3:223-228, 250-253, 265-266; September 17, and October 1, 1924.

This is a report of children's reading interests, grades seven to twelve, in Franklin County, Ohio, not including Columbus. Little relation was found between required reading and children's first choices. Popular magazines show the highest frequency of use; informational magazines, very low frequency. Ninety per cent of the pupils read newspapers.

151. Whitney, F. P. "Culture and Utility," School and Society, 19:627-634; May 31, 1924.

Mr. Whitney raised the question as to whether industrial arts should be classified as cultural or utilitarian. He points out that when manual arts is reduced to merely assignments dealing with tools and the handling of the same it is utilitarian, and that when the course is used to give a sympathetic insight, to broaden the horizon, to train in imagination and give free play to ideas, it is cultural.

152. Williams, D. C. "A Junior High School Course in Nutrition for Boys and Girls," Journal Home Economics, 17:513-516; September, 1925.

A digest of an outline for a course in home economics dealing with nutrition for both boys and girls. The material is listed under thirteen general headings pertaining to foods.

153. Winslow, L. L. "Constructive Plan for Organization and Administration of Junior High School Courses in Industrial Arts for Boys," Industrial Arts Magazine, 10:243-247; July, 1921.

Presents a diagram to aid teachers in planning their outline of instruction, and also discusses the sequences of courses in the seventh, eighth, and ninth grades in industrial art work.

154. Winslow, L. L. "Junior High School Art Program," School Arts Magazine, 25:85-90; October, 1925.

The author thinks that an adequate program of art education for the junior high school student should include the following topics: color, freehand representation of form, design, lettering, and appreciation. Most of the instruction in art can be motivated by industrial and commercial interests. Appreciation seems to be the chief objective sought in art work, but the hardest to attain. In all the topics mentioned above the pupil must be given an apperceptive basis derived from actual contact with materials plus the related information to make the material significant from the intellectual side.

155. Winslow, L. L. "Significance of Art as a Junior High School Subject," *Educational Administration and Supervision*, 10:495-503; November, 1924.

The returns from a questionnaire sent to 14 school centers reveals that art education is in a state of uncertainty. The author recommends that art instruction aims to establish in pupils desirable attitudes toward their work and life, correct standards of appreciation, and the desire for self-expression.

156. Winslow, L. L. "Program for Industrial Arts in Junior High School," *Education*, 44:419-424; March, 1924.

The author thinks that the success or failure of an industrial course depends a great deal upon the way it is taught. A good teacher should be refined, sympathetic, and master of the subject. An industrial arts course should enrich the curriculum, develop an appreciation and skill in tools.

157. Witt, H. A. "Printing in the Junior High School, Industrial Arts Program," *Industrial Arts Magazine*, 30:3-5; July, 1928.

The teachers in Tulsa think that printing has done a great deal for progress in school work and that printing should be placed on a par with other school subjects. A list of six objectives for printing is given.

158. Wright, A. A. "Sentence Structure in the Junior High School," *Junior-Senior High School Clearing House*, 4:538-543; No. 9; May, 1930.

Presents specific weaknesses most common in college classes of English and what they did to overcome them in the West Hartford, Connecticut Junior High School.

159. Zulli, F. "Objectives in Home Economics for the Seventh, Eighth and Ninth Grades," *Journal Home Economics*, 16:107-112; March, 1924.

In this article Miss Zulli points out the specific contributions which in her judgment the subject of home economics may and should make to the attainment of some of the cardinal principles of education, namely, health, home membership, wise use of leisure time, pre-vocational training:

"I. Health:

- a. Nutritional phases of health.
- b. Facts of personal hygiene.
- c. Relation of home sanitation to health.
- d. Relation of clothing to health.

II. Worthy home membership:

- a. Right attitudes toward home and family.
- b. Recognition of the importance of the family group.

- c. Responsibility toward the home in which she lives.
- d. Respect for and appreciation of work in the home.
- e. Ability to efficiently and intelligently to save and spend.
- f. Desire to obtain a working knowledge of the home.
- g. Desire to develop a skill for her age and need.

III. Wise use of leisure:

- a. Familiarity and appreciation of the beautiful home.
- b. Instruction and experience in hospitality and social ease.
- c. Opportunity to show how to make the most of spare time for improvement of the body, mind, and spirit.

IV. Prevocational:

In some schools home economics is the only subject offered to girls to give them training of a vocational type."

160. Zuppan, C. A. "Fundamental Principles Underlying Shop Tryouts in Courses in Junior High School," *Industrial Education Magazine*, 26:353-357; June, 1926.

Presents fundamental aims or principles underlying shop tryouts in courses in the junior high school concluding with the idea that the chief one is to provide equal opportunity for every child and to give every child a more general education. Mr. Zuppan thinks the greatest difficulty at present with respect to tryout courses is that we have no adequate grading system for the work done.

IV. EDUCATIONAL AND VOCATIONAL GUIDANCE.

161. Allen, C. F. "Locating and Minimizing Difficulties of Junior High School Pupils," *School Life*, 15:88-89; January, 1930.

Mr. Allen found the students' chief difficulties were: being overworked, having too heavy a load, having too difficult assignments, being overburdened with clerical work, and problems in articulation.

162. Allen, R. D. "Function and Organization of Educational and Vocational Guidance in the Junior High School," *Vocational Guide Magazine*, 8:99-103; December, 1929.

A discussion of vocational and educational guidance in the junior high school. Suggests possible methods and policies to follow to obtain the best results with students of junior high school age.

163. Alltucker, M. M. "Aiding Adolescence to Interpret Life," *National Education Journal*, 17:59-60; February, 1928.

The author believes that the chief purpose of the junior high school is to help the adolescent to find himself both in respect to the work and school activities. He recommends general or culture courses for the junior high school.

164. Bird, V. A., and Peckstein, L. A. "General Intelligence Machine Shop Work, and Educational Guidance in Junior High School," *School Review*, 29: 782-786; December, 1921.

The results of an experiment to see if pupils with a high intelligence quotient can do better on the engine lathe than those having a lower I. Q. After a careful experiment it was found that the student with the I. Q. of 90 did better in that kind of work than the one with an I. Q. of 120.

165. Boyer, C. A. "Guidance in the Junior High School." *Junior High School Clearing House*, 3:12-16, January 1, 1929.

This is a discussion of guidance. It is the mediator between the child on the one hand and his work of environment and opportunity on the other. It should take him by the hand and lead him along those paths of self-realization and social service to which he is best adapted through mental, moral, social and service to which he is best adapted through mental, moral, social, and physical endowment. The author states that there are many kinds of guidance necessary—vocational, educational, etc.

166. Brewer, J. M. "Practical Arts for Vocational Guidance in Junior High School," *Manual Training Magazine*, 23:69-72; September, 1921.

Mr. Brewer shows the correlation between practical arts and other vocational training. He also gives what he thinks should be included in a practical arts course in the junior high school.

167. Brooks, F. D. "Accuracy of Intelligence Quotients from Pairs of Groups Tested in the Junior High School," *Educational Psychology*, 18:173-186; March, 1927.

Presents the results of an experiment with 108 pupils, carried on in a junior high school in Baltimore. The testing period covered six weeks in which time the students were given the following tests: Miller, Form A; Otis, Self administering, Form A; Illinois, Form A; Terman, Form A; Haggerty, Delta 2; National, AI; Dearborn Revised, C; Dearborn, Revised D; Pinterer, Nor-Language.

Table page 176 gives difference between pairs of tests. Tables on pages 179-181 give the correlation of the test with each other in pairs. Pages 185-186 state the conclusions arrived at from this experiment.

168. Clem, O. M., and Malloy, K. V. "Some Individual Differences of Pupils in One Typical Junior High School," *Educational Administration and Supervision*, 16:39-52; January, 1930.

The authors give a rather detailed discussion of the individual difference of pupils in a typical junior high school in respect to mental abilities, classroom results and physical differences.

169. Clem, O. M., and Wacket, J. K. "Comparative School Marks of September and January Junior High School Entrances," *Journal of Educational Research*, 20:360-366; December, 1929.

An experiment was conducted to see if the students entering in September did better work than the students entering in January. One hundred and eighty-three students in each group were tested in four subjects and it was found that the distribution table was practically the same for both groups. However, the periods when the groups received their best marks came at different times in the school year; those entering in January did best immediately and those entering in September did better the second semester.

170. Colburn, J. B. "Adjusting the Maladjusted Girl," *National Education Association*, 18:92; March, 1929.

Description of an experiment carried on at the Manhattan Junior High School, New York, with forty girls from thirteen to fifteen years of age who had failed in the regular work. When placed in the right classes they succeeded in passing the work.

171. Davis, C. O. "Provision for Individual Differences Among Pupils," *Addresses and Proceedings of the National Education Association*, 778-788; 1926.

A questionnaire study based upon eighty-six junior high schools to determine current practice in providing for individual differences.

Mr. Davis says in summary:

"It is evident that eleven schools rely on random selection alone, while five schools rely on teachers' judgments alone as a basis for classification of pupils into sections. 'Teachers' judgments' is listed fifty-eight times. In contrast with these there are the criteria of mental and educational tests, which are used together with other criteria by twenty-one of the eighty-six schools. 'Mental tests' is listed forty-five times."

172. Eckert, D. Z. "Exploratory Opportunity of the Junior High School," *Industrial Arts Magazine*, 12:171-174; May, 1923.

Illustrates how one of the functions of the junior high school, that of providing for individual differences, can be exercised to a high degree in manual arts.

173. Eckert, D. Z. "Educational and Vocational Guidance Program in the Junior High School," *Industrial Arts Magazine*, 11:291-294; August, 1922.

The author shows how intelligence tests, educational, and vocational tryout courses are given to aid in placing the students in the Latimer Junior High School in the right courses.

174. Edgerton, A. H. "Uses and Limitations of Standardized Tests in Junior High School Industrial Arts," *Addresses and Proceedings of the National Education Association*, 890-898; 1925.

The author shows how standardized tests may be of real value in a junior high industrial arts course both by illustration and discussion. He also points out the limits of said tests, showing that some results cannot be tested in that manner.

175. Finch, C. E. "Junior High School Study Tests," *School Review*, 28:220-226; March, 1920.

Presents data relative to study tests in junior high school from three points of view, namely, the tests themselves, how the teachers may aid the students through tests, and remedial testing measures.

176. Forman, W. O. "Vitalizing the Junior High School," *Journal of Education*, 111:96; January 27, 1930.

The way to vitalize the junior high school is to make it a part of the life of the community. A Key Club sponsored by Kiwanis Club represents an attempt to bring students into personal contact with some of the best men in the community.

177. Foster, C. R. "Morals and Student Activities," *National Educational Journal*, 16:113-115; April, 1927.

Data given as to the need and method of character development in the junior high school. The ideals for which we should strive are:

- "1. Qualities—high sense of humor, fairness, helpfulness, politeness, and tact.
2. Initiative, that is, resourcefulness, enthusiasm, leadership, and service.
3. Learn to pass all grades with an earnest effort.
4. Growth in self-control, consideration for right of others, and civic responsibility."

178. Franklin, Earle Edward. "The Permanence of the Vocational Interests of Junior High School Pupils,"

John Hopkins University. Studies in Education. No. 8; 1924.

Presents the distribution of vocational choices among entering pupils of eight of the ten junior high schools of Baltimore and indicates to what degree these choices are permanent from Grade 7B to Grade 7A. The effect of a summer vacation and also the combined effect of a period covering half a year's school work and a summer vacation on pupils' vocational interests, are also shown. In addition to this the effect of one year on the original choices is presented and the interests and the intelligence of the pupils eliminated during the year are analyzed.

179. Grubs, Harold D. "Educational and Vocational Guidance in Junior High Schools," *Industrial Arts and Vocational Education*, 19:212-215; June, 1930.

Presents a summary showing that the following groups need expert counsel:

- "1. The pupil uncertain about his choice of selections.
2. The prospective drop-out.
3. The pupil who is failing in one or more subjects.
4. The pupil in need of financial assistance.
5. The socially maladjusted pupil."

180. Hardin, V. M. "Guidance as a Function of the Junior High School." *Junior High School Clearing House*, 3:17-20; October, 1928.

The author thinks guidance is a conscious attempt to direct the activities of the child toward worthy objections. He says the kind of guidance needed is curriculum, vocational, health, and moral. In conclusion, the author states that the idea underlying this program of guidance is to turn out of our schools citizens who are trained to take an intelligent part in a self-governing society, able to carry their proper share of the common economic load and capable of employing their leisure time in activities socially and individually rewarding.

181. Hermans, M. C. "Directed in Social Adjustment in the Junior High School," *English Journal*, 17:219-228; January, 1928.

Since the students in the junior high school come from such different types of home they need direction in making social adjustments, the home conditions, intelligence, attitude, and character of a child should be known to give him the aid he needs socially.

182. Keener, E. E. "Results of Homogeneous Classification of Junior High School Pupils," *Journal Educational Research*, 14:16-20; June, 1926.

An experiment in the grouping of junior high school students in five Chicago Junior High Schools where the Otis Group Intelligence Test was used. The results of the test showed a definite need for classification and

pupils were arranged according to ability. Even then it was found necessary to allow for the differences within the groups.

183. Leavitt, F. M. "Vocational Guidance in Its Relation to the Junior High School Industrial Education," *Industrial Arts Magazine*, 24:39-41; August, 1922.

Mr. Leavitt believes that all junior high schools should have a Smith-Hughes department for the children who are not able to go to the senior high school, as they will then be better equipped to earn a living.

184. Loves, M. "Opportunity in Junior High School Work," *School Review*, 30:755-759; December, 1922.

Mr. Loves gives several illustrations to show the opportunity for vocational work in the junior high school and sets up five aims of the work:

To continue the common school education in a gradually diminishing degree, to explore the aptitudes of children, to ascertain the children's needs, to reveal the possibilities in the major field of learning, and to start each pupil on the career which will be of most profit to him.

185. McCoy, W. T. "Individual Differences in the Junior High School," *Chicago Schools Journal*, 12:89-96; November, 1929.

Discussion of the use of the Otis Classification Tests, in aiding pupils to shorten the time they are in the junior high school. Includes several case studies of how students were aided through these tests.

186. Moore, C. B. "Junior High School Citizens," *Elementary School Journal*, 28:30-38; September, 1927.

Presents data of 350 junior high school students about what they consider an ideal person; 842 statements were made by students with references to the school and 197 with references to life outside of the school. Gives tables relative to characteristics and frequencies of traits of an ideal citizen.

187. Pickell, F. G. "Ability Grouping of Junior High School Pupils in Cleveland," *Journal of Educational Research*, 11:243-253; April, 1925.

Mr. Pickell thinks it is easy enough to tell the dull pupil from the bright, but the difficulty is with those in between these types. He believes that the greatest difficulty in ability grouping is in allowing for temperament, overcoming objections of the parents as to their children's classification, allowing for electives, distributing teachers' marks, providing for acceleration, giving enriched and suitable subject matter.

188. Robinson, E. L. "Guidance Scheme in the Junior High School of Tampa," *Junior High School Clearing House*, 4:96-100, No. 2; October, 1929.

The author discusses the plan of guidance in effect in Tampa, which he outlines under the following headings:

- (1) Principal, a man, deals with special problems of the boys and the assistant principal, a woman, deals with the girls.
- (2) The entire curriculum and organization is worked out with the general guidance idea in mind.
- (3) Guidance is the keynote of all activities and all teachers are expected to participate in the scheme.

189. Rostetler, D. R. "Vocational Guidance in Rural Communities," *Industrial Arts Magazine*, 11:174-176; May, 1922.

The author thinks there is a need for guidance in the rural communities in that farming is now done in a scientific way. Likewise many students do not remain on the farm and need guidance in other subjects. Students in rural communities should have an opportunity to try several activities.

190. Schultz, F. "Vocational Guidance in the Junior High School," *Educational Review*, 63:238-246; March, 1922.

The three chief difficulties which the school meets in the guidance of the pupils are that the child is ignorant of the things to be done in a certain vocation, that he does not know what he can do, and that he has little interest in either study or occupational work. To overcome this situation the schools are giving tryout courses, expert counselling, and presenting organized material for the various vocations.

191. Terry, P. W. "Social Experiences of the Junior High School Pupils," *School Review*, 35:194-207, 272-280; March, April, 1927.

Describes two general types of organizations for giving pupils social experience: (1) a group of organizations to which every pupil belongs or is related in some way, (2) a group of organizations which pupils join in pursuit of a special interest of some kind.

192. Theilgaard, S. A. "Socializing Activities in the Junior High School," *Chicago School Journal*, 12:185-190; January, 1930.

A general discussion of the activities in which students take part in a junior high school which aid them in becoming more mature socially. The author also points out how these activities may be conducted to the best advantage.

193. Unzicker, S. P. "Mental Handicapped Adolescent in Junior High School," *School Review*, 36:52-57; January, 1928.

Mr. Unzicker thinks that all students should be encouraged to attend school and then be placed in the right class and environment, and assigned work according to their ability. He believes in giving the subnormal more manual work than academic work.

194. Viele, A. V. "Adjustments for Individuals Made in Junior High School," *Journal of Educational Research*, 17:108-112; February, 1928.

The matter of adjustment for individuals is a question upon which there is little agreement. Some regard homogeneous grouping as undemocratic, and they suggest enrichment of the course of study.

V. COLLEGE ENTRANCE REQUIREMENTS.

195. Crawbill, I. R., and Wessel, H. M. "Study of College Entrance and Senior High School Credits for Junior High School Work," *School and Society*, 21:210-212; February 14, 1925.

The authors suggest three possible solutions for revising college entrance requirements in such a way as to give credit for junior high school work:

- "1. Keep the number of units for college entrance the same, and allow four units to be completed in the junior high school.
2. Increase the number of credits and credit all junior high school work in regular college preparatory subjects.
3. Decrease the number of credits, and give credit only for the tenth, eleventh and twelfth years' work."

196. Evans, A. W. "Adjustment of College Entrance Requirements to the Junior High School," *High School Quarterly*, 13:215-222; July, 1925.

Traces briefly the growth of college entrance requirements standardizing agencies from the year 1642 to 1922. By the year 1922, there were forty different agencies for standardizing college entrance requirements in the United States. The author points out the need for a standard relative to college entrance requirements as effected by the junior high school work, especially since about seventy-five per cent of the cities with a population of over 100,000 now have junior high schools.

197. "Effect of the Junior High School on College Entrance Requirements," *School Review*, 34:563-566; October, 1926.

The result of an inquiry of the Bureau of Education of the United States to ascertain the effect of the spread of junior high schools upon college entrance requirements. The answers revealed that the small colleges were more liberal than the larger colleges in accepting

three years' work of the senior high as entrance credits. There were 9.4% in the small college group which accepted twelve credits for entrance. The New England and Northwest Associations were the most conservative.

198. Pickell, F. G. "Junior High School and College Entrance Requirements," *School and Society*, 18:114-116; July, 1923.

Mr. Pickell thinks that the best interest of the junior high school students can be served if the matter of college entrance is separated from the work done during that period. That is, he believes that the students should be taught to think, to develop good habits, to have ideals, and to know material of value in itself rather, to be given preparatory work to meet college entrance requirements.

199. Santee, J. F. "College Admission and the Junior High School," *American School Board Journal*, 79:48-49; August, 1929.

No one scheme of college entrance requirements is infallible, but that it would be much better for the junior high schools if the colleges would accept the three years' work of the senior high school for entrance to college. The best results are obtained from a type of admission known as a probation method.

VI. CERTAIN JUNIOR HIGH SCHOOLS.

200. Ballou, F. W. "Junior High Schools in Washington," *School and Society*, 20:225-231; August, 1924.

Superintendent F. W. Ballou tells how they successfully solved problems arising when the junior high school system was adopted in Washington. The problems dealt with curriculum revision, properly trained teachers, changing salary schedule, adequate buildings, and making the junior high school an institution in itself.

201. Cox, R. W. L. "Bayonne Junior High School," *Journal of the National Education Association*, 19:3-4; January, 1930.

A discussion of the organization and aims of the Bayonne Junior High School. The pupils are classified according to intelligence tests. Students who do not show an aptitude for perceptual learning are assigned to the practical departments of the school. One of the aims is to educate the adults as well as the students in school through making the school a community center.

202. Crecelius, P., and Others. "Ben Blewett Intermediate Schools of St. Louis," *Journal of the National Education Association*, 17:239-240; November, 1928.

A report of the organization of the Ben Blewett Junior High School of St. Louis, Missouri, in 1917, under the direction of R. W. L. Cox. Two points stressed in its organization were (1) ability grouping, and (2) pupil participation in school government.

203. Deal, A. "Development of Junior High Schools in District of Columbia," *School Life*, 11:115; February, 1926.

A brief report of the junior high schools organized in the District of Columbia in 1919.

204. Foster, C. R. "Latimer Junior High School," *Elementary School Journal*, 24:279-289; December, 1923.

A report of the courses and organization of the Latimer Junior High School at Pittsburgh. Four different types of courses are offered: academic, commercial, technical, and prevocational. Each of these courses is arranged so as to meet the needs of those taking it. In addition to these excellent provisions for curriculum work, many extra-curriculum activities are provided for one hour out of the six hour schedule.

205. Gonnely, J. F. "Development of the Junior High School in Chicago," *Chicago Schools Journal*, 12:46-51; October, 1929.

A discussion of the development of the junior high school since 1917 in the city of Chicago. Three of these schools were organized in 1917 and in 1924 only one remained. A complete study of the junior high school was made at that time and twenty junior high schools started; five new buildings completed and others remodelled. The scholarship in two senior high schools was higher for those who attended a junior high school.

206. Hertzler, S. "Junior High School in Connecticut before 1872," *School Review*, 35:751-756; December, 1927.

A brief discussion of the work of the schools in Middletown, Connecticut, in 1849 and later at New Haven, Connecticut, showing how it was like our present junior high school work in many respects.

207. "Holding Power of Rochester Junior High Schools," *School Review*, 32:726-729; December, 1924.

The holding power of the junior high school is much greater than that of the grade school in Rochester. Formerly only 58.7% of the grade children entered high school and now 86.3% of the junior high school students enter high school.

208. "Individual Training in the Montclair New Jersey Junior High School," *School and Society*, 26:675; November 26, 1927.

A careful study of a group of seventh and eighth grade children in Montclair revealed that less than one in five ever attended college. Therefore, a plan of individualized instruction was started in which the school life of junior high school students was built around experiences they would need to earn a living.

209. Judd, C. H. "Junior High Schools of San Antonio, Texas," *Elementary School Journal*, 24:732-741; June, 1924.

A report of the new schools in San Antonio, Texas, where the superintendent arranged only five years in the grade schools and then started the children in the junior high school. All the teachers in the system were enthusiastic about the plan.

210. "Jackson Junior High Schools," *Elementary School Journal*, 21:408-409; February, 1921.

A brief description of the required and elective courses of study for the Jackson Junior High Schools.

211. "Junior High School in Denver, Colorado," *School Review*, 36:85-86; July, 1928.

The two advantages listed in favor of the Denver junior high schools are that the students stay in school longer and that they seem to be able to select their college work better than under the old plan.

212. "Junior High School in Des Moines, Iowa," *Elementary School Journal*, 20:484-486; March, 1920.

A discussion of a five-year building program for junior high schools in Des Moines, Iowa. The advantages of the junior high school are given as:

1. Provides for special rooms.
2. Gives richer and varied program of studies.
3. Offers exploratory courses.
4. Provides for individual differences.
5. Helps keep pupils in school longer.
6. Makes the transition to high school easier.

213. "Junior High Schools in Pennsylvania," *School Review*, 31:85-87; February, 1923.

A report of all the junior high schools in the state. There are fifty-two such schools in operation and the odd thing is that the rural district report more such schools than the boroughs. Where records have been kept, they show that the junior high school has aided in an increase of thirty-five to forty per cent in attendance.

214. Kern, W. M. "Junior High School in Washington," *Education*, 49:100-110; October, 1928.

The first part of the article is a brief discussion of the criticism of the traditional educational program and the characteristics of the junior high school.

The second part presents data relative to the junior high schools in the state of Washington. Information about the junior high schools was obtained by sending letters to all country superintendents requesting such data as were desired and the superintendents in turn obtained the data from the individual schools. Forty-three different items in respect to the junior high school are tabulated on pages 108-110. There were only two items on which all the schools agreed, namely, including grades 7-8-9, and having the instruction departmentalized.

215. Longanecken, F. M. "Three Junior High Schools," American School Board Journal, 66:59-64; April, 1923.

A report of the three schools that are practically alike in construction and organization. Nearly all the teachers employed have had junior high school experience and have degrees.

216. Lyman, R. L. "Junior High Schools of Atlanta, Georgia," School Review, 33:578-592; December, 1924.

Mr. Lyman gives a discussion of the survey of the Atlanta, Georgia schools conducted by Professors G. P. Strayer and N. L. Engelhardt in 1921-1922. They recommended the adoption of the 6-3-3 and six junior high schools by 1940. The city has five of the junior high schools in operation at present.

The author discusses briefly the following topics with reference to the Atlanta Junior High Schools: (1) teaching staff, 50% men teachers, (2) program of studies, examples page 584-585, (3) ability grouping by intelligence quotient, (4) guidance—educational and vocational, (5) differentiation in instruction, (6) self-government, (7) avocational interests.

217. Lyman, R. L. "Junior High Schools of Kansas City," School Review, 36:176-191; March, 1928.

A report of a survey of the Junior High Schools in Kansas City, Kansas. Kansas City has adopted a "pay-as-you-go" plan of building its schools. English, social studies, physical education, and mathematics are required subjects. Pupils are grouped according to ability and given ample opportunity in try-out courses to see what they can do so that they enter the best curriculum for them in senior high school.

218. Lyman, R. L. "Junior High Schools of Montclair, N. J.," School Review, 29:495-509; September, 1921.

A survey of the junior high schools in Montclair, N. J., in respect to teachers, methods of teaching, programs of study, types and organization, and ability grouping. Commends the teachers and their training for the subjects they are teaching.

219. Lyman, R. L. "Washington Junior High School," School Review, 28:178-204; March, 1920.

A detailed discussion telling how Washington Junior High School succeeded in keeping students in school longer than the grade and high school organization plan. In the four years it had been in operation, 92% of the children entered the ninth grade. Chief means employed to retain students were the content and arrangement of the curriculum, ungraded vocational program, vocational guidance, supervised study, and the socialization of the entire school into a democracy.

220. Lyman, R. L. "Ben Blewett Junior High School of St. Louis," School Review, 28:26-40, 97-111; January, 1920.

A review of the Ben Blewett Junior High School of St. Louis as to its organization, curriculum, building, and school community. In the first part of the article the author indicates the emphasis which the school places upon social science as the core of the curriculum and upon grouping according to ability. A bird's-eye view of the curriculum is given on pages 32-35. An outline is given of the educational projects and vocational guidance work on pages 37-40.

The second part of the article discusses the place of English, general science, mathematics, art, music, practical arts, supervised study, athletics, and clubs in the organization of the curriculum and school. He gives a list of clubs and their operation on pages 107-110.

221. Lyman, R. L. "Junior High Schools of New Hampshire," School Review, 34:175-184; March, 1926.

A report of the rural junior high schools in New Hampshire. Shows the holding power of these schools over the grade schools. Nearly all of them are organized on the 6-6 basis. The junior high schools are thought to be responsible for 100 per cent increase in enrollment.

222. Lyman, R. L. "Walter French Junior High School of Lansing, Michigan," School Review, 37:433-450; June, 1929.

A survey of the Walter French Junior High School of Lansing, Michigan, in respect to library facilities, curriculum, individual instruction, avocational clubs, school and home cooperation, and opportunity rooms. Considerable part of the discussion is devoted to the values of an opportunity room.

223. Lyman, R. L. "The Junior High Schools of San Antonio, Texas," School Review, 38:414-439; June, 1930.

The article deals with five points, namely, integration, normalization, individualization, exploration, so-

cialization, and organization. The organization of the San Antonio schools is a 5-3-3 scheme.

224. Phillips, H. S. "Report of a Committee on Junior High Schools, Denver, Colorado," *Elementary School Journal*, 23:13-24; September, 1922.

Presents data obtained by sending a questionnaire to sixty-three junior high school systems relative to the length of the school day, supervised or directed assembly periods, and extra-curricular activities. The chief reasons for great variation in practice seemed to be due to poorly trained teachers and lack of adequate building facilities.

225. Preston, J. T., and Others. "Junior High Schools of Berkeley, California," *United States Bureau Educational Bulletin*, 4:1-48; 1923.

A detailed discussion of the junior high schools of Berkeley, California in respect to organization, teaching staff, curricula (discussion of various subjects) buildings, counseling program, and contributing agencies.

226. Stauffacher, H. W. "California Vocational Junior High School; the John Dewey School of Long Beach," *Sierra Educational News*, 25:44-45; November, 1929.

A discussion of the Long Beach John Dewey Vocational Junior High School which is attracting attention because of the opportunities it offers to the adolescents who are not interested in regular school. The children are grouped according to shops instead of by grades and one-half of the day is spent in the shop, and the other half of the day is spent in related technical subjects—English, social science, and physical education. Diplomas are given to those completing two years vocational training.

227. Van Denberg, J. K. "Twenty-four Junior High Schools in Small Centers," *Educational Review*, 67:90-93; February, 1924.

The author believes that junior high schools in small towns can be in the same buildings as the senior high schools. There will be a beneficial effect upon both the teachers and students in the junior high school.

228. Ward, L. C. "Junior High School Abandoned at Fort Wayne, Indiana," *Elementary School Journal*, 22:647-649; May, 1922.

According to Mr. Ward, Superintendent of schools at Fort Wayne, Indiana, the board of education changed from departmental work to a junior high, but the work was not as good and the cost more; therefore they changed back again.

VII. STATUS, STANDARDS, TENDENCIES, AND TRENDS.

229. Alltucker, M. M. "New Schools for Adolescents," Addresses and Proceedings of the National Education Journal, 16:297-298; December, 1927.

Brief discussion of the purpose and nature of the junior high school showing how it has met the demands of pupils above the seventh grade as social individuals.

230. Aldredge, A. C. "Improvement of Practice in the Junior High School," National Education Proceedings, 619-624; 1929.

The article gives suggestions how practices in the junior high school may be improved and brought to a higher level. Six things are discussed to raise the standards; nearly all of them are about the teachers in respect to their selection, training, philosophy, personality, supervision and improvement in service.

231. Benson, Arthur A. "The Status of the Junior High School," Addresses and Proceedings of the National Education Association, 528-531; 1920.

Mr. Benson gave an address in 1920 and at that time he described the condition of the junior high school as "Chaotic." The scheme at that time was not very favorably considered by the educators, some even calling it a fad. He gave seven reasons why he thought the junior high school would continue:

- "1. The junior high is a conserver of human energy during the early teens and reduces human loss.
2. It must be organized through its clubs and activities to take care of the budding social aspirations of all children.
3. It must open up the child mind along definite lines of industry.
4. It saves the children time and energy through freedom allowed in his selecting his school work.
5. It saves boys and girls from getting into blind alley jobs.
6. It has a teaching force which is adapted to teaching adolescent children.
7. There is unlimited opportunity for over-age boys."

232. Bentley, J. H. "Junior High School Buildings," Addresses and Proceedings of the National Education Association, 400-404; 1922.

The survey made by Mr. Bentley reveals the fact that up to that time there was no special type of building for the junior high school. The only noticeable things were that the new buildings all had a tendency to pro-

vide special rooms for work of a shop type. In some cases the space allotted to the special rooms took sixty-five per cent of all the classroom space.

233. Bolton, F. E. "Some Paramount Objectives," *Education*, 47:285-295; January, 1927.

Presents what the author considers some paramount objectives of the junior high school. He includes departmentalization, a liberalized curriculum, vocational guidance, and citizenship.

234. Bristow, W. W. "Junior High School a Factor in the Rural School Problem," *School Life*, 13:167-169; May, 1928.

Presents data to show how the junior high school may benefit people in a rural community, and includes some plans which were effective in several states.

235. Briggs, E. S. "Exploration in Junior High School," *Addresses and Proceedings of the National Education Association*, 665-668; 1927.

A summary of the aims stated by Mr. Briggs for an exploratory course in the junior high school were:

- "1. Acquaint the pupil by a try-out with the possibilities in the vocational fields of activity.
2. Offer a choice of future work and show possibilities if the pupil will but persist in school.
3. Acquaint the child with specialized secondary courses.
4. Give the pupil an estimate of his educational adaptabilities early in his career.
5. Present material which is worth while in itself."

236. Briggs, T. H. "Status of the Junior High School," *Educational Administration and Supervision*, 9:193-201; April, 1923.

In the first part Mr. Briggs discusses the rapid growth and reorganization of our schools. He, also points out that the junior high schools have been established as rapidly as is wise and in a few cases too fast.

In the second part, he points out that parental criticism, the tradition of the teacher, short term of office for a leader, creation of new curricula and courses of study are all obstacles which have retarded the establishment of junior high schools. In the third part, he discusses the new subjects taught in junior high schools.

237. Bruckner, G. E. "High Days in Junior High," *Illinois Normal Instructor and Primary Plans*, 38:71-72; October, 1929.

A discussion of two methods used in the Greely, Colorado, Junior High School to instill more interest

in literature and dramatics. The students dress dolls to represent characters in the novels they read and also the students dress like the characters.

238. Carney, M. "Rural Influence and Possibilities of Junior High School Organization," *Journal of Rural Education*, 3:65-71; October, 1923.

Discusses the usual advantages of the junior high school and also the special advantages for rural communities. Thinks junior high school opportunities must come through state aid.

The author believes that junior high school opportunities must be brought to the rural children before they can make unchallenged claims to its great usefulness as a vital agency for the promotion of democracy.

239. Caldwell, W. L. "Complete Equipment," *School Review*, 38:84; February, 1930.

Mr. Caldwell gives a complete list of rooms and equipment for an approved junior high school building. A good outline for a moderate sized high school.

240. "Conference on the Junior High School, Temple University, Philadelphia," *School and Society*, 22:563-564; October 31, 1925.

Presents a summary of the topics discussed dealing with the junior high school at a conference held at Temple University, Philadelphia, Pennsylvania.

241. "Conference on the Junior High School," *School and Society*, 22:431-432; October 2, 1925.

The members of the National Education Association met to discuss the problems of the junior high school. The topics taken up were credit and college entrance, guidance, reconstruction of the program of studies, and special problems of the various groups there.

242. Cordozo, F. W. "Junior High School, Its Origin and Trend," *Education*, 43:589-603; June, 1923.

A brief resume of the junior high school movement as to its origin, purpose, objectives, and effects on pupils or teachers. The junior high school had its origin about 1910, but it really started about 1920. The attitude of grade and high school teachers toward the junior high school is discussed.

243. Cortright, B. E. "How Shall We Interpret the Junior High School and the Junior College Movements," *School and Society*, 31:273-276; March, 1930.

Both the junior high school and junior college are of value in themselves as a survey of these schools revealed that forty-seven per cent of the graduates did not go any further with their educational work.

244. Cox, P. W. L. "Junior High Schools in our Changing Secondary Schools," *California Quarterly Secondary Education*, 5:219-226; April, 1930.

Mr. Cox gives the various reasons why he thinks the junior high school is not more successful than it is at present. He cites intrenched academic interests, lack of articulation, influences outside the school which have the children 4,750 hours each year and the school only for 800 hours, many new social problems, lack of freedom in what is taught, and lack of cooperation of the various people who should be interested in the success of the junior high school.

245. Crentz, L. R. "Five Years of the Junior High School Idea in a Small City," *School Review*, 33:139-146; February, 1925.

The city is Monroe, Wisconsin, where they departmentalized the work of the seventh, eighth and ninth grades. With a slight change as recommended by the state department it was a junior high school with an enriched curriculum idea. After five years the author cannot see that the junior high school has made any great change in the education of the pupils, but the teachers and community wish to continue the work.

246. Davey, John R. "A Course in Human Betterment for the Junior High School," *Junior-Senior High School Clearing House*, 4:588-590; June, 1930.

A description of a course in social science organized on the unitary basis. The different units were:

- "1. The Struggle for Security.
2. The Rising Standard of Comfort.
3. This Thinking World.
4. This Humane World.
5. Beauty in Living."

With the above are listed supplementary textbooks which give seventy-five titles for reading.

247. Davis, C. O. "Our Justification for the Junior High School," *School Review*, 35:174-183; March, 1927.

Mr. Davis mailed twenty-five questionnaires to superintendents of the best known junior high schools in the central west in order to obtain their opinion of the value of the junior high school. Twenty men replied and eighteen justified the junior high school on the ground that it made the transition from the grades to the high school easier, increased the attendance, allowed for individual differences, and decreased problems in discipline.

248. Deffenbaugh, W. S. "Significant Movements in City School Systems," *School Review*, 31:643-644; November, 1923.

The author points out that the most significant movement in city school systems is the organization of

grades seven, eight, and nine into a junior high school. He believes it has done more than any other one thing to bridge the gap between the elementary school and the high school.

249. Edmonson, J. R. "Standardization of the Junior High School," *School and Society*, 16:271-273; September 2, 1922.

The article gives the results of the 1922 annual meeting of the North Central Association of Colleges and Secondary Schools in standardizing the work of the junior high schools. The results were such that a joint committee was appointed to study the question and report at the 1923 meeting of the association.

250. "Equipment," *School Review*, 38:84; February, 1930.

Mr. H. Wallace Caldwell gives a list of what he thinks is needed for equipment of a junior high school. He lists thirty classrooms, three gymnasiums, cafeteria, administrative suite, fifteen special rooms for the vocational work of all kinds, rooms for the use of doctors, nurses, etc., rest rooms for the teachers, and a library.

251. Fellows, W. K. "Building Plans for the Junior High School," *School Review*, 33:35-40; January, 1925.

Discusses the plan used in building junior high schools in Chicago, Illinois. It is known as the Springfield plan of building units. Several years ago the buildings were constructed with the auditorium and gymnasium on the second floor, but found it very unsatisfactory. Now they are placed on the first floor and used as a social center for the entire school community.

252. Ferriss, Emery N. "Wide Variations of Practice in Small Junior High Schools," *School Life*, 22:193-195; June, 1927.

An investigation of one hundred thirty-five small junior high schools revealed that there was a big variation in respect to buildings, courses and organization. The most common type was the 6-3-3 type of school. The next was the 6-6 type. Seventy-five per cent had classes from forty to fifty minutes, but seventeen per cent did have more than fifty minutes for the class period. Only one-half had gymnasiums and only one-third had motion picture machines. Nearly all reported good libraries.

253. Ferris, E. N., and Others. "Rural Junior High School; Report of a Sub-Committee of the National Committee on Research on Secondary Education," United States Bureau of Education, 29; Bulletin No. 28, 1928.

A report of a subcommittee of the national committee on research in secondary education.

- Chapter I—Introduction, purpose, and method of table on page three giving distribution of schools by states.
- Chapter II—Purposes of junior high school with a summary table on pages eight and nine.
- Chapter III—Reorganization of secondary education from standpoint of state departments of education. State requirements and method employed summarized on pages 17 and 19.
- Chapter IV—Legal provisions relative to the junior high school given on page 22.
- Chapter V—Practices in organization and administration. Distribution tables pages 25-36.
- Chapter VI—Program of studies. Courses offered given in tables on pages 42 and 43. Suggested programs on pages 45-47.
- Chapter VII—Improving the school social situation.
- Chapter VIII—Individual differences. Table page 55.
- Chapter IX—Pupil guidance. Table on page 64.
- Chapter X—Rural J. H. S. buildings. Tables on pages 71-72.
254. Fitzpatrick, J. A. "Appraisal of Junior High Schools," *Journal of Education*, 110:167; September 9, 1929.
- The junior high school developed as an attempt to bridge the gap between the elementary school and the high school. The author points out that the social situation is very different in the junior high school from what the pupils were accustomed to in the grade school, therefore expert leaders should be provided for social adjustment.
255. Forman, W. O. "Height as a Basis for Competitive Athletics in Elementary and Junior High Schools," *Elementary School Journal*, 25:207-210; November, 1924.
- The author objects to the present method of dividing boys into weight classes for athletic contests in elementary schools and junior high schools in track performances. He suggests, instead: (1) In the running high jump any boy who jumps sixteen inches less than his height has only reached the minimum. Every inch added to his first performance constitutes an additional test. (2) In the standing broad jump ten inches more than his height gives him his minimum jump on first test. (3) In the hop-step-jump any boy who makes a record of 3.35 times his height passes his first test. (4) In the running broad jump any boy who jumps forty inches more than his height passes his first test.
- The author is of the opinion that his plan offers the boy a chance to watch his own progress, and encourages more boys to participate in track work than if the traditional method is followed.
256. Gardner, C. A. "American Notes," *Education*, 48:459-460; March, 1928.

An editorial telling how the junior high school provides activities and devices which are the most effective means of approaching the basic ideals and purposes in American education.

257. Gladfelter, H. B. "Basic Purposes and Functions of the Junior High School," *Education*, 46:139-144; November, 1926.

Some general purposes of the junior high school are to relieve the congested buildings, make school curriculums more democratic, and lessen drop-outs. Gives the purposes and functions of the junior high school as set up by Mr. Thomas Briggs.

258. Glass, J. M. "Careers in Education; Technique in Junior High School," *National Education Journal*, 17:145-147; May, 1928.

First part of this article presents the characteristics of a good junior high school teacher and the last part gives a summary of courses a prospective junior high school teacher should study while in college.

259. Glass, J. M. "Mission of the Junior High School," *Peabody Journal Education*, 5:208-217; January, 1927.

States as the mission of the junior high school:

1. A unit of transition to weld together the elementary and secondary education.
2. To aid the child in exporting his own aptitudes.
3. To offer a reconstructed course of study.
4. To give the child a modern-social-practical concept.
5. To help the students through guidance.
6. To offer the students an opportunity to take part in extra-curricular activities.

260. Glass, J. M. "Recent Development in the Junior High School Field," *High School Quarterly*, 40-53; October, 1925.

Presents data as to the present status of the junior high school in the larger cities. Seventy-five per cent of the cities over 100,000 in population have junior high schools, and practically all are organized on the 6-3-3 plan. The author also discusses the 5-3-3, 6-6, and 6-2-4 plans of organization. The last part of the article deals with teacher preparation, supervision, public interest, curriculum reconstruction, and present trends in programs of studies.

261. Glass, J. M. "Review" *New Republic*, 36:19-22; November 7, 1923.

Presents four charts to show the relation of the elementary school, junior high school and senior high school to each other. The author gives the aim of the

junior high school as "Individual justice." An equal opportunity for all. The method is given as guidance.

262. Hill, H. C. "Differentiation in Program of Studies in Rural Junior High Schools," Addresses and Proceedings of the National Education Association, 474-478; 1928.

Mr. Hill presents reasons why the program of studies in a rural junior high school should be adapted to the needs of the student not intending to go to college. He likewise stresses the point that teachers who do effective work should be selected for these schools.

263. "Is the Junior High School to be a Separate School?" Elementary School Journal, 29:89-92; October, 1928.

A report dealing with the question in England. The two sides contend as follows; the side in favor of making the junior high school a separate school believes that the elementary schools are not adapted to the adolescent youth of the country and should be changed; the other side, not wishing to make the junior high school a separate school thinks that if the size of the class is reduced, better books provided, and more equipment secured the elementary school can do the work as well as the junior high school.

264. "Junior High School," School Executives Magazine, 48:502-503; July, 1929.

In a report on the junior high schools, especially those in New York City, the author of the article thinks that there is a certain disappointment in what they have been accomplishing. This is partly due to the fact that we expect too much of the pupils when they enter the senior high school. We should remember that the junior high school is for special courses and not especially to have the pupils do better work in high school and college.

265. Koos, L. V. "The Peculiar Functions of the Junior High School: Their Relative Importance," School Review, 28:673-681, November, 1920.

The functions listed by Mr. Koos in his survey were:

- "1. Realizing a democratic school system through
 - (a) Retention of pupils.
 - (b) Economy of time.
 - (c) Recognition of individual differences.
 - (d) Exploration for guidance.
 - (e) Vocational education.
2. Recognizing the nature of the child.
3. Providing the conditions for better teaching.
4. Securing superior scholarship.
5. Improving the disciplinary situation and socializing opportunity."

266. Learned, G. H., and Cloud, A. J. "Experiment with Tenth Year Terminal Courses," *California Quarterly Secondary Education*, 4:342-343; June, 1929.

Presents data to show that the students remain in junior high school longer when the curriculum is organized on the basis of tenth year terminal courses.

267. "Length of the Junior High School Day," *American School Board Journal*, 76:136; June, 1928.

Thirty-two of the sixty-three cities studied had 55-60 minute periods. Fifty-seven had supervised study. The schools having sixty minute periods had six periods, and the ones having five periods had from fifty to ninety minute periods.

268. Lewis, F. E. "Social Science in the Junior High Schools of Fordson," *Junior-Senior High School Clearing House*, 4:605-608; June, 1930.

Description of a social science course in the Fordson schools in which the work was organized on a directive study basis. That is, the students receive sheets on which are directions for the study of the unit. The directions tell what to look for and how to organize the material. In addition the socialized type of class work is used. All the desks have been taken out of the classrooms and have been replaced by chairs and tables as in a reference room or library.

269. Logan, R. S. "The Junior High School and Its Relations," *Progressive Education*, 6:17-22; January, 1929.

The junior high school enrollment is increasing rapidly having changed from 37,331 students in 1920 to 628,809 in 1926. There are more than 1,100 junior high schools in this country. They are found in seventy-four per cent of the cities with a population of more than 100,000.

270. Lyman, R. L. "Study of Twenty-four Recent Seventh and Eighth Grade Language Texts," *Elementary School Journal*, 24:440-452; February, 1924.

An analysis of twenty-four recent seventh and eighth grade language texts shows that twelve of them are for the junior high school and twelve for the elementary grades. There is a wide variation in the material taught, some teaching a good deal of grammar and others, very little; the same is true as to study helps; none has oral English to any extent. There is little difference between the two types of textbooks.

271. Marquis, W. J., and Terry W. P. "Legislation on the Junior High School," *United States Bureau Education Bulletin*, 29:1-42; 1924.

Presents data relative to legislation on the junior high school. In chapter one an analysis of junior high school legislation showing that eighteen states have passed laws permitting their establishment (Table page 10). In chapter three is shown the organization of junior high schools in states having no legislation relating explicitly thereto. In a majority of the thirty states the local district is free to establish junior high schools on its own initiative and according to its own plans.

Chapter four deals with reports of state departments of education concerning additional junior high school legislation. Thirty-nine states report they have no laws which hinder junior high school organization. Twenty-two states report that no additional statutes were desirable. Chapter five gives the problem of legislative stimulation of the junior high school. (Table, page 31.)

Pages 35-42 give definite state laws relating explicitly to the junior high school in Alabama, Arkansas, California, Georgia, Indiana, Maine, Maryland, Massachusetts, Minnesota, Nevada, New Hampshire, New Jersey, Ohio, Pennsylvania, Vermont, Virginia, West Virginia, and Wisconsin.

272. Miller, W. T. "What's in a Name?" *Popular Educator*, 43:11; September, 1925.

A discussion of the objections to the name "Junior High School." The author gives the two chief objections as (1) does not describe the thing it names, and (2) ties up the new type of school too closely to the senior high school. Mr. Miller suggests that the name "Intermediate Schools," is an ideal name.

273. Muller, A. D. "Junior High School in Rural Communities," *Journal of Rural Education*, 4:407-411; May, 1924.

The author discusses the aims and purposes of the junior high school as outlined by the North Central Association of Colleges and Secondary Schools—(1) to continue the aims of public education in a democracy, (2) to reduce the elimination of pupils by offering suited work, (3) to give a child a chance to discover his vocation, (4) to economize time. The junior high school should play an important part in the rural community as one teacher can not conduct an efficient school with eight grades and an over-crowded room. The requirements to organize a junior high school in a rural community are: (1) reorganization of curriculum, (2) adequate buildings and equipment, (3) specially prepared teachers' districts may combine to make this organization possible.

274. Olander, V. "Junior High School from the Other Side," *Educational Review*, 68:86-94; September, 1924.

A report of a talk given by Mr. Orlander of the Illinois Federation of Labor who gave his criticisms of the junior high schools in Chicago. The chief criticism was that he thought them undemocratic.

275. "Outlook for Junior High Schools," *Educational Review*, 65:177-178; March, 1923.

In 1923 the tendency in many parts of the United States was to change to the junior high school in the larger cities. Some cities are departmentalizing their schools and calling them junior high schools as they find this plan cheaper.

276. Palmer, T. J. "Why the Junior High School?" *Journal of Education*, 110:13-14; July, 1929.

A brief discussion as to why there is a need for the junior high school. The junior high school does four things for the students: (1) allows for individual differences, (2) presents material in a stimulating manner, (3) gives exploratory course, (4) gives health, moral and aesthetic training.

277. Porter, C. S. "Junior High School Intramurals," *Mind and Body*, 35:12-14, April, 1928.

A report of the intramural athletic program as carried out in the Whittier Junior High School, Lincoln, Nebraska, for a five year period. One of the events in the program of athletics is a series of tournaments. There are thirty-four home rooms, each of which enters a team in every tournament.

278. Powers, J. O. "Legal Provisions and Regulations of State Departments of Education Effecting Junior High Schools," *School Review*, 33:280-291; April, 1925.

First part of the article presents data in tabular form giving the legal provisions of the various states relative to the junior high school. Part two gives a summary in tabulated form relative to the curriculum subjects and the frequency of each subject's appearance as a required or elective study.

279. Powers, J. O. "Is the Junior High School Realizing its Declared Objectives?" *School Life*, 14:76-79; December, 1928.

The first part of the article gives a description of studies made of junior high school in several large cities. The author thinks they are reaching their objectives in respect to buildings, vocational guidance, retaining students, making school attendance more desirable, and educational guidance; but he also suggests that a great deal is still left to be done in attaining the objectives set up by the junior high school.

280. Pratt, O. C. "Status of Junior High Schools in Larger Cities," *School Review*, 30:630-670; November, 1922.

Presents data, obtained by sending out a questionnaire to all the cities in the U. S. having a population over 100,000. Of the sixty cities that replied twenty-six had junior high schools and twenty more were organizing such a school. Data given in tables indicated that practically all these cities were in favor of the junior high school.

281. "Reaction of the Junior High School Movement," *Elementary School Journal*, 23:248-252; December, 1922.

Presents arguments for and against the junior high school movement. Concludes with favorable comments for the movement citing as examples the junior high schools in Denver and Cleveland.

282. Remy, B. D. "Is the Junior High School Delivering the Goods?" *National Education Association*, 833-835; 1921.

The author is of the opinion that the junior high school is doing a good job by departmental teaching, subject promotion, caring for individual differences, and earlier introducing pupils to vocational work.

283. Renwick, A. "Junior High School vs. The Six-Year High School," *Education*, 43:232-243; December, 1922.

The author concludes that it would be best for schools having an enrollment of less than five hundred students to organize their system so that they have only one school for the six years, rather than two separate schools.

284. Renwick, A. "Critical Examination of the Principles Underlying the Junior High School," *Education*, 43:604-619; June, 1923.

Reviews the opinions of various men such as Barker, Gosling, etc., in regard to the junior high school. In the second part of the article the author discusses individual differences, for the adolescent, better health programs, better training, better organization of subjects, departmentalization, and special rooms for the vocational work.

285. Schraeder, C. W. "Junior High School Tendencies," *Education*, 47:22-27; September, 1926.

The author discusses the detrimental tendencies in the junior high school and makes suggestions as to how they may be remedied.

286. Shankland, S. D. "Review," *Educational Review*, 73:129-133; March, 1927.

Mr. Shankland presents a brief review of the following topics: (1) junior high school curriculum, (2) why the junior high school was organized, (3) college entrance requirements, (4) junior high school cost, (5) the junior high school teacher, (6) articulating the junior and senior high schools.

287. "Socialization of the Junior High School," *High School Quarterly*, 15:41-55; October, 1926.

A report of the sub-committee of the Commission on the Reorganization of Secondary Education, appointed by the National Education Association, telling how a junior high school may be socialized through its assembly programs, class organizations, school community, student clubs, and home room activities.

288. Spaulding, F. T. "Should Rural Communities Attempt to Establish Junior High Schools?" *Junior High School Clearing House*, 3:23-28; February, 1929.

The author points out that a worth-while junior high school can be established in a rural community, but is very unlikely to be ideal. Mr. Spaulding, also states that the handicaps of a rural junior high school are handicaps in any type of rural school. The author recommends their establishment with proper supervisory officers.

289. Spencer, W. L. "Report of the Committee on the Junior High School of the Association of Colleges and Secondary Schools of Southern States," *High School Quarterly*, 14:88-93; January, 1926.

A report showing that 63 per cent of the junior high schools have been organized since 1923. Enrollment 38.5 per cent less than one hundred students. 85 per cent think the benefits are positive. Vocational and educational guidance is stressed.

290. "Status of the Junior High in New York City; Elementary or Secondary," *School Review*, 38:168-169; March, 1930.

The corporation council in New York decided that the schools are more of the elementary type than of the secondary type so the people who are suing for their salaries as secondary school salaries cannot collect, as such.

291. Sutton, Willis A. "Health and Physical Education in Junior and Senior High Schools," *Department of Superintendence, Sixth Yearbook, National Education Association*, 457-486; 1928.

This is a report on athletics in secondary schools. The participation of all pupils in the athletics or physical education of the school is stressed. "Competition, to serve its full purpose, must involve all," says the committee, "and should only eventually result in varsity teams." The committee is not in favor of having the junior high school students competing with students from other junior high schools; but thinks the competition should be only intramural. In senior high school the committee believes a limited schedule of varsity games in limited territorial zones under state athletic association rules should be permitted.

The committee discourages competition of girls in any form of inter-school contests and recommends that all teaching, coaching and officiating should be done by efficient women teachers.

The games recommended for secondary schools are soccer, baseball, tennis, basketball, football (for senior high, unless a modified sort), and track.

292. Switzer, C. F. "Housing Grades Seven and Twelve," *Education*, 44:144-153; November, 1923.

Mr. Switzer points out the following things as being essential in housing grades seven to twelve:

- "1. Schools should have plenty of room to expand.
2. Buildings should be such as to meet the needs of the community.
3. Buildings should be arranged to allow for social needs, as community center.
4. There should be a combination building for junior and senior high school students in case the enrollment is less than 1,000 for either one alone."

293. "Two Studies of the Junior High School," *School Review*, 37:11-12; January, 1929.

The author asks these two questions: "(1) Does the junior high school effect economy of time? (2) Does the junior high school bridge the gap between the elementary school and the high school?" In answer to the first question the author gives an affirmative answer. In respect to the second question, he believes the gap seems to have been postponed one year and now falls between the ninth and tenth years.

294. Unzicker, S. P. "Study of the Teaching Load in Wisconsin in the Junior High School," *School Review*, 37:136-141; February, 1929.

Presents tables to show the enrollment, number of teachers, and number of students per teacher in Wisconsin junior high school. There is a discussion about classifying pupils, size of classes, amount of outside work, and library work.

The results of the study revealed that the teaching load varied from 451 students to 952 in English; 475

to 947 in mathematics; 466 to 953 in social science studies; 502 to 945 in science; 319 to 673 in manual arts; 294 to 677 in home economics.

295. Unzicker, S. R. "What Size Junior High School?" *School Review*, 36:374-379; May, 1928.

A discussion of the advantages and disadvantages of the large junior high school (over 500 students) over the small junior high school in respect to administration, type of work, extra-curriculum activities and discipline. The author draws his conclusions from his experience as a teacher in both sizes of school at Fond du Lac, Wisconsin.

296. Unzicker, S. R. "Withdrawals from Junior High School," *Journal of Educational Research*, 16:198-202; October, 1927.

It was found that the pupils who withdrew from the junior high school had a lower intelligence quotient than those remaining. Almost twelve times as many in the lower sixth of the I. Q. list withdrew as those above. Two-thirds of the ones withdrawing who had a low I. Q. were boys.

297. Weet, H. S. "Education Objectives of Junior High School," *Addresses and Proceedings of the National Education Association*, 764-772; 1926.

Mr. Weet believes that most of the inefficiency in our schools is beyond the sixth grade and to avoid this we must set up objectives in the junior high school. Some of his objectives are to know the child, aid him in guidance, develop him according to his ability, aid him in self-application, and help him form right habits.

298. Weglem, D. E. "Development of the Junior High School in a City System," *Addresses and Proceedings of the National Education Association*, 260-263; 1927.

A brief discussion of the development of the junior high school in the city of Baltimore with respect to teachers selection, curriculum revision, teacher supervision, and articulation both with the elementary and senior high school.

299. Wilmeth, P. D. "Why the Junior High School Movement in Eastland and Some of its Possible Influences," *Texas Outlook*, 14:21; April, 1930.

This junior high school in Eastland was organized because of the need of another school caused by the great oil boom. This seemed to be the best plan as only two additional teachers needed to be added. Does not display all the characteristics of the junior high school as presented by the Research Division of the National

Education Association except for (1) separate building for one to seven grades, (2) separate staff of teachers, (3) departmental organization, (4) definite and effective plan of pupil guidance. The curriculum for each section of each grade is given on page twenty-one. The junior high school movement may be the means of bringing about a consolidation of nearby districts where there is only a ward school of one to five grades.

300. Winters, T. H. "Chartering of Junior High Schools in Ohio," North Central Association Quarterly, 4:358-365; December, 1929.

This article is about the junior high schools in Ohio, in which state they seem to be the most numerous at present. The author thinks that the biggest handicap to the advancement of the junior high school is that there are not enough trained teachers for the work. In some cases there are enough teachers, but then the school boards will not or cannot pay the salaries to employ them. Many schools are trying to give too many courses rather than to teach a few well.

301. Withers, J. W. "Place and Function of the Junior High Schools in the American School System," Addresses and Proceedings of the National Education Association, 759-765; 1927.

A brief survey of the public schools in the United States from 1890-1927 shows that there has been a rapid growth in the enrollment in the schools. In this scheme of education the junior high schools took an active part about 1911. The educators felt that the elementary schools were failing in the matter of pupil retention and that the junior high would be an aid in keeping pupils in school longer. School authorities recognize that there is a need for two kinds of learning—the practical and the formal; in both of these the junior high plays an important part.

VIII. TRAINING OF TEACHERS FOR JUNIOR HIGH SCHOOL.

302. Glass, J. M. "Teaching in the Junior High School," National Education Association Journal, 145-147; May, 1923.

The author gives a list of courses a prospective junior high school teacher should study in college. Some of the courses recommended are adolescent psychology, educational psychology, junior high school methods, curriculum study, work in management, and guidance.

303. McGregor, A. L. "Preparing Teachers for the Junior High School," Educational Review, 49:140-142; March, 1925.

A discussion of how teachers preparing for the junior high school are taught to remedy the defects of the grade school and how to teach in the junior high school. Stress is placed on health, mental and manual power, personality and character training.

304. Overman, J. R. "Preparation of Teachers in the Junior High Schools for Mathematics," *School Science and Mathematics*, 23:842-852; December, 1923.

The author points out that a teacher of mathematics for the junior high school should have as good a preparation as a senior high school teacher. He gives five essentials for a junior high school mathematics teacher:

1. Four year college course.
2. Thorough knowledge of psychology.
3. Thorough mastery of mathematics.
4. Practice teaching under critical supervision.
5. Knowledge of the history of mathematics."

305. Proctor, W. M. "Training of Teachers for the Junior High School," *Education, Administration and Supervision*, 11:13-17; January, 1925.

Teacher training institutions must place greater emphasis on subject matter or content courses; training for guidance function of the junior high; a group consciousness; and finally a uniform standard for certification which is higher than the present one.

306. Stockwell, L. E. "Training of Junior High School Teachers," *Industrial Arts Magazine*, 15:113-115; April, 1926.

The author thinks that a trained industrial teacher is better than a skilled artisan to instruct students in manual arts. Gives a table, page 114 showing the professional training of industrial arts teachers, only 15 per cent having a bachelor's degree. And the table on page 115 shows the teaching experience of industrial arts teachers. The median is 6.28 years.

307. Terry, P. W. "Training Program for Junior High School," *Educational Administration and Supervision*, 16:144-148; March, 1930.

The author divides his discussion of teacher training for junior high school teachers into two parts. In part one he points out that the efficiency of a teacher depends largely upon her training. In the second part he gives data to show to what extent states regulate certification of teachers for the junior high school positions. The four types of certificate were:

- a. A bachelor's degree is required in large cities.
- b. Extending the elementary certificate for the junior high schools.
- c. Certain professional courses.
- d. Special certificates for the junior high school.

308. "Training of Junior High School Teachers," Educational Administration and Supervision, 9:257-270; May, 1923.

A report of a committee meeting of the Association of Supervisors of Student-Teaching at Cleveland, Ohio. The report is divided into four parts:

1. Gives the relation between principles underlying the junior high school and principles controlling programs of teacher training.
2. Gives data to show that teacher training programs need to be reorganized.
3. Gives a list of courses offered in teacher training institutions which deal with junior high school problems.
4. Gives the conclusions and recommendations of the committee.

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